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CONTENTS: Vol. LXX., No. 7 (Series No. 1412).

	PAGE		PAGE
American News ... <i>Col. Supp.</i>		Legal Reports	251
Bankruptcies and Failures	253	London Drug-statistics	275
Belladonna for Laudanum	257	Marriages	255
Births	255	New Companies and Company News	253
Books, New	265	Observations and Reflections	259
Business Changes	254	Opium-assay	266
Canadian Notes	250	Personalities	255
Chemical Society	267	Pharm. Soc. of Great Britain:	
College Notes ... <i>Col. Supp.</i>		Evening meeting	266
Coming Events ... <i>Col. Supp.</i>		Pharm Soc. of Ireland:	
Correspondence	276	Council-meeting	256
Deaths	255	Poisonings	256
Deed of Arrangement ...	253	Practical Notes	270
Editorial Comments:		Prescription-problem ...	270
Poisons in 1905	260	Sage Oil	263
German Opium	261	Scotch News	248
Notes	262	South African News	250
English News	246	Trade-marks Applied for	250
Ergotoxine	267	Trade Notes	263
Festivities	264	Trade Report	271
Foreign Trade Statistics ..	275	Westminster Wisdom ...	258
French News	249	Wills, Recent	255
Gazette	253	Winter Session	268
Information Wanted ...	269		
Irish News	248		

DRUGGISTS' SHIPPING TRADE.

THE Export Merchant Shippers' Issue of THE CHEMIST AND DRUGGIST will be published on March 9. The recent Board of Trade Returns testify to the extraordinary growth of the export trade from this country, chemicals, medicines, and allied products showing in 1906 more than the general average increase in quantities and values; and doubtless a large share of the future trade could be obtained by special efforts on the part of our advertisers to place their goods well before the trade in this number. In addition to the usual circulation to subscribers, copies will be sent to the buyers in the principal Export Shipping Offices throughout the United Kingdom. The Publisher will be glad to give any further information regarding the Number on application.

Summary.

The subjoined paragraphs give the gist of the more important matters in this issue, with the object of showing at a glance what has happened during the week. See also "Contents" in the first column.

THE Dundee butter-of-antimony case is giving rise to intricate legal argument in the Court of Session (p. 251).

A NEW SECRET SOCIETY has been formed called the London and Provincial U.R. Druggists' Association (p. 274).

THE imports and exports of drugs and chemicals to and from Great Britain for January 1907 are given on p. 275 in a table comparative with 1906 and 1905.

SOME further particulars of the career and a portrait of Mr. Snowden Kirk, whose death was briefly referred to in last week's issue, are given on p. 255.

SOME interesting figures regarding the cultivation of opium-poppies in Berlin and the quality of the opium produced are given in an editorial note (p. 261).

SHOULD pharmaceutical students in Ireland attend chemistry lectures? Dr. Ashe and the Council think they should, but the Castle opposes (p. 256).

A. W. GAMAGE, LTD., of Holborn, have been fined under the Pharmacy Act for selling Pharaoh's serpents (mercuric sulphocyanide) without a poison-label (p. 251).

MEMBERS of the Irish Pharmaceutical Council are alive to possible pharmacy legislation. The President addressed them on the subject at the meeting last week (p. 256).

THE LICENSING MAGISTRATES throughout England are now systematically refusing wine-licences to chemists unless they give an undertaking to deal only in medicated wines. A large number of cases are reported on p. 247.

CITRIC AND CHRYSOPHANIC ACIDS, shellac, and coconut oil are all dearer. Bromides are unaltered. Cod-liver oil is firmer, and cocaine may advance. Antimony and sugar of milk are lower. The auction of first and second hand drugs is fully reported on p. 271.

"XRAYSER" wants to know wherein Mendeléeff's periodic law was superior in conception to Newlands' law of octaves. He also refers to the prospects of pharmacy legislation and the Pharmaceutical Society's 121. 10s. 3d. meeting of Association delegates (p. 259).

THE B.P. PROCESS for assaying opium is practically correct (a little under the truth). So Messrs. Farr and Wright reported to the Pharmaceutical Society on Tuesday evening, and at the same time Mr. Tickle described a morphine shaking-out process with cresol as the solvent (p. 266).

MR. RYMER YOUNG, President of the Pharmaceutical Society, in a speech at Leicester this week, strongly supported the view that a Select Committee should be appointed to look into a matter of pharmacy legislation. Mr. Winfrey has undertaken to introduce the Pharmacy Bill again (p. 265).

At the further hearing of the evidence in the charge of manslaughter against a Battersea chemist it was stated that the accused made it a habit of filling bottles of poisons himself every morning, and the circumstance which led up to the belladonna error was shown to be exceptional and the work of boys. We report the evidence on p. 257.

THE official returns of poisoning cases in England and Wales during 1905 are analysed in an editorial article. It is shown that the majority of suicides are with carbolic, hydrochloric, and oxalic acids; also that there is effective control of fatalities from medicinal poisons owing to the careful manner in which registered chemists handle them (p. 260).

WE report fully a spirit-of-nitre case, in which Mr. Glyn-Jones brought forward the novel argument that even if the B.P. is the standard for this spirit it cannot apply to sales of pennyworths and similar small quantities, as the standard refers solely to stock in bottles opened occasionally, while in ordinary sales the shop-bottles must be opened scores of times (p. 267).

TWO of Messrs. Burroughs Wellcome & Co.'s researchers appear to have got nearer the discovery of the active principle of ergot. This, they say, is ergotoxine (the hydra-ergotinine of Kraft), and the contamination of other principles with this alkaloid makes them active. The particulars are in a paper communicated to the Chemical Society, and reported on p. 267.

English News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Brevities.

Mr. H. Whittell is giving up business at the Drug-stores, 42 High Street, Heckmondwike, and is going abroad. The stock-in-trade and fixtures are to be sold by auction.

A box of menthol snuff is among the clues left by the thieves concerned in the robbery of art treasures at Mr. Wertheimer's house in Norfolk Street, Park Lane, London, W.

A porter in the employ of the Lancashire and Yorkshire Railway Co. was charged at Bradford on February 8 with stealing six bottles of Owbridge's lung- tonic, value 6s. 9d., which had been consigned to a chemist at Bradford.

The chemists of Burnley having asked to be excluded from the Shop Hours Closing Order, the Town Council have decided to take a ballot on the question. The Town Clerk states that, if excluded, chemists will be prohibited from selling what is prohibited in other trades.

At Merthyr on February 4, Arthur Jones was charged with attempted suicide. It was stated that prisoner had obtained some prussic acid at Abertillery for the purpose of poisoning a dog. He drank the poison instead, and was found unconscious, but recovered after medical treatment.

At the meeting of the Manchester Section of the Society of Chemical Industry held on February 8, papers were read by Dr. J. W. Mellor on "Some Physical and Chemical Changes in the Fixing of Pottery Bodies and Glazes," and Mr. W. F. A. Ermen on "The Examination of Commercial Starches."

Inspector Jarratt, of the Surrey County Police, who has been responsible for summoning hundreds of motorists, was summoned at Reigate for assaulting a motorist. The principal witness for the defendant was Mr. John Cross, chemist and druggist, Redhill, who deposed that there had been no assault. The case was dismissed.

The Council of the Society of Arts attended at Marlborough House on Friday, February 8, and the Prince of Wales (President) presented the Society's Albert Medal to Sir Joseph Wilson Swan, F.R.S., "for the important part he took in the invention of the incandescent electric lamp, and for his invention of the carbon process of photographic printing."

The question of the destruction of stray dogs and cats was before the Burnley Town Council on February 6. The minutes of the Watch Committee recommended that a Richardson lethal chamber should be purchased, at a cost of 75l. Hitherto, dogs and cats brought to the police station for destruction have been poisoned by prussic acid. The recommendation was agreed to.

At the Mansion House Police Court on February 14, James Woolford, a man of colour, was again remanded on a charge of obtaining 70l. by false pretences from Oscar Joseph Klein, trading as Charles Buch & Co., 6 Mincing Lane, London, E.C. The charge had reference to bills of lading concerning a cargo of antimony ore; and at the same court on the same day, Henry James Grant Seymour was charged, also on remand, with being concerned with others in obtaining 7,200l. from Messrs. Buch & Co. in connection with the same transaction.

L.C.C. Chemists.

At the weekly sitting of the London County Council on Tuesday, it was decided to increase the number of senior assistants in the Chemical Department by one; and that Mr. J. H. Coste, who is now receiving a salary of 300l., be promoted out of the first class to the position of senior assistant, at the commencing salary of 300l. a year, rising by annual increments of 25l. to 350l. a year. It was also decided to increase the salary of Mr. G. S. A. Caines to 200l. a year.

Drugs in Camberwell.

The public analyst of Camberwell in his last quarterly report drew attention to the fact that the food and drugs inspector had succeeded in detecting a high percentage of adulterated samples in the articles purchased (milk, butter, etc.), which would probably have gone undetected had he

devoted a portion of his time to drugs, etc., in which there was little adulteration. The subject was referred to the Public Health Committee, which reported, on January 12, that 560 samples of drugs were examined in the Metropolis in 1905, the latest year for which figures were available. The approximate number of samples taken in each borough was nineteen, and the percentage adulterated was 8.4. In 1906, in Camberwell, six samples of drugs were analysed, and of these every one was genuine. The committee considered that the food and drugs inspector deserved credit for the results obtained.

No Favouritism.

It having been suggested that Messrs. J. J. Griffin & Sons, Ltd., Kingsway, London, E.C., have received exceptional treatment from the London County Council with regard to a cellar-flap at their new premises in Kean Street, Mr. T. McKinnon Wood, a director of the company, has shown, in a letter sent to the London daily papers, that not only has no favour been shown his company, but in some instances the Council drove a hard bargain. Messrs. Griffin were reinstated in Kean Street at the same rent they paid in Sardinia Street, and have also leased adjoining land, making their total rental 800l. a year, in addition to spending 23,000l. on buildings other than those reinstated by the Council. Since this explanation was published Mr. R. A. Robinson has asked a question about it at the L.C.C., and a committee has been appointed to report on the matter. A note on the new premises appeared in the *C. & D.*, January 26, p. 167.

Chemist's Licences.

Off wine-licences have been granted to:

Mr. J. S. Dent, chemist and druggist, Dereham.

Mr. Ernest Hemming, Melyn Drug-stores, Neath.

Taylor's Drug-stores, Ltd., Guildford Street, Leeds.

Mr. Charles Barnett, chemist and druggist, Uppingham.

Timothy White Co., Ltd., 28a Sandgate Road, Folkestone.

Mr. Thomas Vickerman, drug-seller, 10 Water Street, Bury, Lancs.

Mr. Walter Law, 30 Hare Hill Road, Littleborough, Rochdale.

Mr. F. J. Flatman, chemist and druggist, 108 Western Road, Hove.

Mr. Lewis John Giles, chemist and druggist, 44 Guildhall Street, Folkestone.

Mr. George James Blore, chemist and druggist, 315 Broad Street, Pendleton.

Messrs. Finn & Sons, druggists, St. Margaret's, Canterbury.

Mr. Thomas Carter, pharmaceutical chemist, Boughton, Chester.

Mr. Walter Eaddie, pharmaceutical chemist, 243 Beeston Road, Leeds.

Mr. Robert Milestone, chemist and druggist, 239 Roundhay Road, Leeds.

Mr. Thomas Needham, chemist and druggist, Buxton Road, Huddersfield.

Mr. Arthur Hill King, chemist and druggist, 24 Bouverie Road West, Folkestone.

Mr. Herbert Llewellyn Allen, chemist and druggist, 59 High Street, Aldershot.

Mr. Alfred Welch Golightly, chemist and druggist, 9 Bridge Street, Sunderland.

Mr. Henry John Turnbull, jun., chemist and druggist, 49 Roker Avenue, Sunderland.

Mr. James Henry Brown, chemist and druggist, 21 Market Hill, Sudbury, Suffolk.

Mr. Jabez Swire, pharmaceutical chemist, 88 King's Cross Road, and 286 Gibbet Street, Halifax.

The off wine-licence attached to the business at 16 The Crescent, Morecambe, has been transferred from Mr. John Birkett, chemist and druggist, to Mr. John Birkett, jun., pharmaceutical chemist.

Applications for licences have been refused to:

Mr. Richard Samuel Longley, chemist and druggist, Togo Buildings, Thurnscoe.

Mr. Joseph Brooks, chemist and druggist, Shude Hill, Manchester.

Mr. Edmund Hirst Sanzen Baker, chemist and druggist, 89 Shields Road, Byker, Newcastle-on-Tyne.

Mr. Henry Jones, chemist and druggist, Middleham, Yorks.

Mr. F. W. Goodess, chemist and druggist, 2A Uppingham Road, Leicester.

Mr. James Kendall Chew, chemist and druggist, manager of Taylors' Drug-stores, Ltd., Thwaites Arcade, Blackburn.

A Chemist-Optician.

At a well-attended meeting of the Manchester and North of England Optical Society held on February 6, Mr. J. C. Kidd, chemist and druggist, delivered a lecture on "Optical Formulæ." The discourse, which was punctuated by black-board drawings, was a capital exposition of one aspect of the science of optics, and Mr. Kidd has promised to deliver another lecture on the same subject at a future date.

Pharmaceutical Council Election.

Members of the Pharmaceutical Society resident in North Wales are organising a petition to their fellow-members throughout Great Britain on the desirability of having a direct representative for North Wales on the Council. The petition is in the charge of Mr. J. W. Bowen, chemist, Criccieth, and Mr. O. Isgoe Jones, J.P., of Llanrwst, is mentioned as a suitable candidate.

Contracts.

The following contracts have been settled:

Chislehurst Urban District Council.—Mr. J. G. Prebble, chemist and druggist, for disinfectants.

Kettering Rural District Council.—Messrs. H. Hitchman & Son, chemists, Gold Street and Market Square, Kettering, for disinfectants.

Salford Town Council.—Tennants & Co., chemical-manufacturers, 49 Faulkner Street, Manchester, for 1,800 tons of sulphuric acid, at 39s. per ton.

The contract for drugs to the workhouse was again a burning question at the meeting of the Ashton Board of Guardians on January 31. Mr. Platt asked the Chairman of the Workhouse Committee if he could see his way to allow the advertisement for drugs, etc., to apply only to tradesmen resident in the Union. He had been told since the last meeting (see *C. & D.*, February 2, p. 177) that there were half-a-dozen chemists in Ashton, Denton, Stalybridge, and Dukinfield, each of whom could supply the articles required. The Chairman said he could not do so in the face of the resolution arrived at by the Workhouse Committee. The Deputy-Clerk subsequently read a letter from Messrs. Bostock & Sons, wholesale druggists, Ashton, referring to the discussion which took place at the previous meeting, and asserting that the Clerk did not reply to any of their letters regarding the supply of medical requisites. They also complained of the medical officer and the Chairman of the Workhouse Committee. The Clerk maintained that all Messrs. Bostock's letters had been replied to by telephone, and after an explanation by him and some strictures by the Guardians on the employment of the telephone instead of writing, the matter dropped.

Birmingham Notes.

Local insurance companies value the risk of the chemist's assistant at 2s. 6d. per annum, while that of the butcher and greengrocer is valued at 12s. 6d.

The new premises of Boots, Ltd., are nearing completion. There are two imposing windows of curved glass of big dimensions, thus securing very large inspection area.

Mr. W. T. Elliott, chemist, now practising as a dentist, is President of the Birmingham Book Club, and took the chair at its meeting on Monday, when the City Coroner read a paper.

Mr. Albert Badham, 45 Ryland Street, chemist, was granted a wine "off" licence at the Brewster Sessions at Birmingham on February 7, when Mr. A. M. Chance occupied the chair.

The Midland Optical Society was formed at Birmingham on January 31. The joint Secretaries are Mr. W. Wright, 9 Station Street, Burton-on-Trent, and Mr. J. C. Rolston, Pope Street, Birmingham.

Whist-drives are not looked upon with favour by the Birmingham Magistracy, and the pharmacists had in consequence to submit to "Time, gentlemen," at the usual hour at their whist-drive at the Grand Hotel.

A round robin has been addressed to the Senate of the University by a dozen well-known analysts and assistant

analysts of the city asking for a course in bacteriology to be given after the usual hours, from 5.30 to 7.30 p.m.

The article on Wislicenus in the "Proceedings" of the Royal Society is from the pen of Professor Percy F. Frankland, F.R.S., who, by the way, has offered his services to form a committee to inquire into the Edalji case.

The University authorities have entered into an undertaking by which they are to analyse samples of milk for a large dairy company of the city, the chairman of which is the Chairman of the Health Committee of the City Council.

As a result of the phenomena preceding and succeeding last Saturday's "aurora borealis," it is a curious fact that many people of both sexes were seized with headache in this city, and the rum on potions and phenacetin was brisk during the afternoon and evening.

A magnificent display of large botanical books, with coloured plates, is on view in handsome showcases at the Reference Library, Ratcliffe Place. They may be inspected by responsible persons on application, and are renewed from time to time to afford change to the public eye.

At the Mayor's Ball pharmacy was very well represented. Among those present with lady were Alderman Clayton, Mr. F. Barlow, Mr. I. Blackwell, Mr. T. Barclay, Mr. Marshall Freeman, Mr. W. F. Haydon, Mr. J. Horton, Mr. Coole Kneale, Mr. Liverseege, Mr. and Miss Southall, Colonel Wyley, and others.

Some consternation has been caused among the University students owing to the Principal's suggestion that the fees in all technical subjects will have to be raised, and fear is entertained that as Manchester has low fees they may migrate there or seek external degrees at London or elsewhere. Expensive machinery at both University depôts (Bournbrook and Edmund Street) is given as the cause of the suggested advance.

The Chemist in Midwifery.

At the inquest at Coed Talon, near Mold, on February 1, on the body of a married woman named Williams, who had died after a confinement, it was stated that the deceased woman was attended by Mr. John Jones, chemist and druggist, of Pontybodkin, and by Elizabeth Humphreys, an unregistered midwife. The husband said he knew that Mr. Jones was not a qualified medical man, but his wife preferred to engage him. In his evidence Mr. Jones said that he had received a note from Mrs. Williams asking if he would attend her at her confinement, if he was required. He was not in when the note arrived, so did not reply. Subsequently a messenger came for him, and he went to see Mrs. Williams. He was sent for again on the Tuesday morning about two o'clock, and he stayed with her till four o'clock. About seven he was sent for again, and when he arrived the child had been born. He removed the placenta. Dr. Bell, who had made a *post-mortem* examination together with Dr. Vincent Trubshaw, said a large *ante-mortem* blood-clot was found in the pulmonary artery. This clot was the cause of death. He was satisfied death was due to natural causes. The Coroner (Mr. Llewellyn Jones) said that though death was due to natural causes the case disclosed what he regarded as a disgraceful state of affairs.

Leeds Notes.

The maximum and minimum readings of the thermometer in Leeds on two successive days last week-end showed a deviation of 24°. These extremes sent dozens of "nervy" folk to the chemists with neuralgia and headache. One of the days referred to was that on which the great aurora display occurred, and it is mentioned in the "Yorkshire Post," by the way, that the people of Filey experienced much headache during the auroral display. Why?

"It's an ill winter wind that blows nobody good." So, doubtless, the Leeds chemists and doctors have thought during the past few weeks. There has been a considerable amount of sickness in the city, brought about by the severe weather. Cough-mixtures have been in tremendous demand, while eucalyptus has become well-nigh another atmospheric element. But chemists had felt matters a trifle dull, what with the phenomenally brilliant summer and the mild autumn, and it needed a real arctic spell to stir things up.

Liverpool Notes.

The staff of Messrs. W. H. Clubb & Co., chemists, Wavertree, held their third annual supper at the "Mar-bourg" last week, and had a good musical programme after supper.

The annual dinner of the Liverpool Dental Hospital and the Odontological Society was held at the Adelphi Hotel on February 9, Mr. Louis S. Cohen presiding. The Bishop of Liverpool, Mr. Leonard Matheson (President of the British Dental Association), and Mr. G. S. Bonnalie (President of the Odontological Society) were among the guests. During the evening an appeal was made for 10,000*l.* required for the new dental hospital.

Sheffield Notes.

Influenza is still rife in the city. The ranks of local pharmacists have not been immune, and a number of absentees from the ball last week were battling with this unwelcome visitor at home.

The general meeting of the Sheffield Pharmaceutical and Chemical Society fixed for Wednesday, February 13, was postponed, owing to the illness of Professor W. Palmer Wynne, F.R.S., who was to have read a paper on "Scheele." We understand that Professor Wynne has been suffering from a severe attack of influenza, and, although recovering, his medical attendant forbids his venturing out in the evening at present.

The report of the city analyst for the quarter ended December 31 last is not a very disturbing document, although the total number of samples examined reached 189. The most striking feature is the statement that out of 117 samples of milk examined eleven contained boron preservative. Four samples of lard and four of camphorated oil examined proved to be genuine, and of three samples of sweet spirit of nitre two were genuine and one was of inferior quality.

On Thursday of last week a youth of nineteen, who some time ago had an attack of rheumatic fever, felt faint, and went into Mr. G. T. W. Newsholme's pharmacy saying that he was suffering pain. He got a draught, but became worse, and on the advice of Mr. Newsholme's assistant was removed to the Royal Hospital, where he died a few minutes after admission. The inquest was held on February 8, when Mr. F. W. Whitworth, chemist and druggist, the assistant, stated that the "stimulant" which he administered to the deceased consisted of

Spirit. ammon. aromat. ...	...	5ss.
Spirit. chloroformi ...	...	5ss.
Tinct. lavandulæ co. ...	...	mxx.
Aquam ad ...	...	5j.

It was shown that the deceased had been in ill health since suffering from rheumatic fever, and the medical evidence proved that the draught administered by Mr. Whitworth was harmless and a perfectly proper one. A verdict of death from heart-disease was returned.

Irish News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Apothecaries Dine.

The annual dinner of the Society of the Apothecaries' Hall of Ireland was held in Dublin on February 9. The Governor (Col. Adye Curran) presided, and among those present were Sir Charles Cameron and Dr. J. C. McWalter. It fell to Sir Charles Cameron to propose the toast of "The Apothecaries' Hall," and in his speech he referred to the part taken by the Hall in maintaining the purity of drugs in Ireland and to the certificate which the Hall grants to dispensers.

L.G.B. Active.

At Castleblaney Board of Guardians, on February 6, a letter was read from the Local Government Board relative to a communication received from Messrs. B. Clarke & Son, Belfast, drug-contractors, in connection with a claim for 3*l.* 5*s.* 6*d.* in respect of unreturned empties. The L.G.B. require to be furnished with an explanation of the delay in returning the empties and the reasons why the claim was not made before.

Irish Drugs.

At the meeting of the Council of the Dublin Industrial Development Association on February 4, the question came up of the supply of Irish drugs by contractors to Boards of Guardians. The Secretary informed the Council that during the past four weeks he had received replies to the Council's circular to all Boards of Guardians in Ireland suggesting that they should advertise and contract for Irish-made drugs, etc. Nearly all the Unions had adopted the suggestion, among whom were the Swinford Guardians, who state that they have decided to insert a clause in their advertisement for medicines, etc., that tenders will be considered from Irish firms only, and that in the case of any article made in Ireland the contractors must supply a guarantee to that effect.

Belfast Business Items.

Mr. H. Ludlow, late manager with Messrs. Fannin & Co., Belfast, has acquired premises in Fisherwick Place, Belfast, and will open business on March 1 in the surgical appliance and instrument line.

The City Apothecaries' Hall, Cromac Street, Belfast, formerly owned by Dr. Corry and more recently by Dr. MacKenna, has been neatly done up, and will in future be known as the "Cromac Pharmacy." It is owned by Mr. H. C. Meyrick, pharmaceutical chemist.

Owing to the prevalence of "spotted" fever, the demand for disinfectants and deodorisers has received a stimulus in the "northern capital," and quantities of eucalyptus oil, camphor, carbolic acid, chlorinated lime, and proprietary disinfectants are being disposed of.

Mr. R. W. McKnight, pharmaceutical chemist, has re-acquired the Apothecaries' Hall, Carlisle Circus, Belfast. Mr. McKnight was principal of the establishment some years ago, and left it when it was taken over by Mr. Agnew. Mr. McKnight was until recently manager of the wholesale drug-warehouse of Messrs. Thacker & Hoffer, Dublin, which has been absorbed by Messrs. Hayes, Conyngham & Robinson, Ltd.

Scotch News.

Local Newspapers containing marked items of news interesting to the Trade are always welcomed by the Editor.

Aberdeen.

Of the twenty-eight sub-post-offices in Aberdeen, fourteen are managed by chemists.

At a meeting of the Kintore Cricket Club held last week, Mr. C. McDonald, chemist, was elected Secretary and Treasurer.

Rumour has it that an old-established business in the centre of the city is to be transferred to the west end of Union Street.

A deputation, consisting of the President of the local Association (Mr. A. L. Bruce), ex-Bailie Paterson, Mr. Spence, and Mr. Reid, waited upon Mr. G. B. Esslemont, the Liberal candidate for South Aberdeen, last Saturday, to ascertain his views on the Pharmacy Bill. Mr. Reid introduced the deputation, and ex-Bailie Jas. Paterson gave a short history of the Bill, and explained its necessity. Mr. Esslemont intimated that he approved of the general principles of the Bill, and that he would give it his further consideration. He would not say that he would prohibit a company using the titles, provided it employs qualified managers. A deputation is to wait on the other candidate on Friday.

Edinburgh.

Cough-lozenges of all kinds and liquorice fill the windows this week. The liquorice ranges in price from 2½*d.* to 6*d.* per stick; a ticket on one attractive display bears the legend, "The kind your grandfather used."

The staff of Messrs. T. & H. Smith, Ltd., held their annual dance in the Masonic Hall on Friday, February 8. About forty couples were present, and they danced from 9 p.m., with unabated vigour and enjoyment, until the early hours of morning.

The Leith fire-brigade was summoned to attend the premises of Messrs. Raimes, Clark & Co., wholesale druggists, Smith's Place, on Saturday morning, February 9,

where the firemen found a fire, which they put out before much damage was done.

One of the outstanding features of this winter has been the prominence of the chemists' own proprietaries. In some of the busier thoroughfares one may see half a dozen varieties of cartoned cough-mixtures and embrocations in as many pharmacies.

Professor Osler lectured to the University students in the McEwan Hall on Friday, February 8, on "Cerebro-spinal Meningitis." Among the deaths from this scourge was that of a boy in the employ of a local chemist. Professor Osler did not think the newspapers need alarm the public as to the prevalence of the disease. There is no widespread epidemic in Great Britain, and no reason why there should be. It is not likely that the disease will prevail longer than this winter season.

Glasgow.

A number of well-known retail chemists have been on the sick-list through the influenza microbe.

Chemists may expect to find a decrease in their sales for breath-perfumes, as local music-teachers are warning their pupils against their constant use.

Dr. John Burns, who keeps an open shop in Bridgeton, had half a column of a local paper devoted to his life the other day. He is in his ninety-second year, and is the oldest medical practitioner in Glasgow.

There were fully 100 applicants for the principalship of the University, and the selection of Dr. MacAlister was unexpected—indeed, the premature announcement of his appointment (three days before the King's assent was gazetted) created surprise. It is hoped that the new Principal will assist in establishing more intimate relations between the University and secondary education in the district. There is a local saying that students go up Gilmore Hill, but the professors never come down. As several thousand students attend the Technical College, the new Principal has a grand opportunity for co-ordination between what goes on in Gilmore Hill and the College.

Co-operative Chemists.

The current issue of the "Co-operative News" contains two pages of pictures and one page of explanatory matter regarding the Scottish Wholesale's chemical department at Shieldhall. During the past year this department has had to be enlarged, and the inauguration of the new premises took place on February 6, a special conference being held at which were present nearly 500 managers and branch salesmen of retail co-operative societies from all parts of Scotland. This department was, we gather, opened in 1892, the first operations being the packing of flour and semolina. Now the factory is said to be the largest and the best equipped of its kind in Scotland. The report states:

Some idea of the expansion of the business may be gained from the fact that the turnover for the first year of the existence of the department was 1,972l.—made up of chemicals, drugs, etc., 633l.; and foodstuffs, 1,338l.—whereas last year—which showed an increase of 17 per cent. on the previous twelve months—it was 44,748l., made up of 34,764l. chemicals and drugs; and 9,984l. foodstuffs. Three years ago the sales amounted to 25,000l., from which it will be seen that during the interval progression has been most marked. One great contributory cause for this is found in the recent action of the members of the Proprietary Articles Association, which caused the wholesale to assert its independence and start manufacturing certain articles for the convenience of the members of the federated societies. The success of this movement has been very great, thanks in great measure to the enterprise of the manager (Mr. Alexander Gebbie), who on all sides has been congratulated on being able to place articles on the market equal, and in some places superior, to those which have been displaced. In some special "lines" the increased trade reaches 100 per cent., particularly in cod-liver oil emulsion, infants' food, pills, etc.

The latest extension will add 25 per cent. to the working accommodation of the factory. The most notable feature, however, is the new laboratory, where everything entering into the composition of the articles produced is tested. The laboratory is fitted with the latest apparatus and appliances. The illustrations give two views of the laboratory, besides views of spice-grinding, the manufacture of citrate of magnesia, filling boot-polish, and filling malt and oil.

French News.

(From the "C. & D." Paris Correspondent.)

SALE BY AUCTION.—An interesting sale by auction will take place in Paris on February 18, 19, and 20, of the furniture, art collection, and old and modern books which belonged to the late M. F. P. Leroux, formerly honorary professor at the Paris School of Pharmacy.

THE LEGION OF HONOUR.—M. Charles Buchet, Director of the Pharmacie Centrale de France, has issued invitations to a banquet to be held at the Hôtel du Palais d'Orsay, Paris, on Wednesday evening, February 27, to celebrate his recent nomination as Officer of the Legion of Honour.

BOOK-POST RATES REVISED.—The one-centime rate of postage has been abolished. On the other hand, the weight carried for 2c. has been increased from 5 grams to 15 grams, and other book-post rates modified. These rates of course affect inland postage only, the minimum rate for printed matter between France and England being 5c. ($\frac{1}{2}$ d.), as hitherto.

THE BONAPARTES AND THE INSTITUTE OF FRANCE.—Prince Roland Bonaparte was elected a "free member" of the Academy of Sciences last week, and is the fourth of his family who has been elected a member of the Institute, his predecessors being his great-uncle, "General Bonaparte" (the Emperor Napoleon I.); his grandfather, Prince Lucien Bonaparte; and Prince Jerome.

KING EDWARD AND PASTEUR.—The painting of "Pasteur's Funeral," which figures in the galleries of paintings of French history at Versailles, is one of Edouard Détaillé's best "official" paintings. King Edward VII. was, it will be remembered, accompanied by the artist (Detaillé) when he visited Versailles last week, and did not fail to notice the work and compliment the painter.

THE MEDICINE STAMP-TAX.—This matter remains in abeyance for the present, and I learn that the proposal to tax all proprietaries—that is to say, all trade-marks or trade-names—has now some very influential supporters in the French Parliament. This is, it will be remembered, the counter-proposal to the medicine stamp-tax brought forward by Dr. Cazeneuve, the Deputy for Lyons, and reported in the *C. & D.* of December 15 last. By an interesting coincidence, in the same issue "Xrayser" also recommended a tax on proprietaries, and I need only add that the French legislators have largely gathered ideas from England in the course they have adopted with regard to the proposed medicine stamp-tax.

BRITISH CHAMBER OF COMMERCE.—On Friday afternoon, February 8, the thirty-third annual general meeting of members of the British Chamber of Commerce in Paris was held at the offices of the Chamber, 17 Boulevard de la Madeleine. The President (Mr. Ablett) was in the chair, and he gave an interesting account of the work accomplished last year in the interests of British commerce. Included in this were information and aid in connection with French Customs difficulties, protection against fraudulent imitation of British trade-marks on the Continent, opposition to the proposed legislation to impose an additional tax on foreign companies trading in France, and the initiation of a special Canadian Section.

THE BANQUET OF THE SEINE PHARMACISTS' SYNDICATE took place at Marguery's Restaurant, Paris, last week. Among those present were M. Coulon; M. Bassinet, Senator; three members of the Chamber of Deputies—MM. Renard, Schmidt, and Abel Bernard; M. Houdé, of the Paris Municipal Council; MM. Grimbert, Delpine, and Tassilly, of the Paris Superior School of Pharmacy; M. Vaudin, President of the General Association of French Pharmacists; Dr. Cazeneuve, Deputy for Lyons; and M. Marty, army pharmacist. Various professional matters—the new tax on "patents," the inspection of pharmacies, a new pharmacy law, etc.—were touched on in after-dinner speeches. At the close M. Georges Coulon, representing the Minister of the Interior, presented the palms of "Officer of Academy" to M. Henry Martin (President of the Seine Syndicate).

South African News.

(From the "C. & D." Correspondents.)

Note.—"The Chemist and Druggist" is regularly supplied by order to all the members of all the Pharmaceutical Societies in British South Africa, viz.:

South African Pharmaceutical Association.
Pharmaceutical Society of Cape Colony.
Natal Pharmaceutical Society.
Transvaal Pharmaceutical Society.
Rhodesia Pharmaceutical Society.
Northern District Chemists' Association.
Pharmaceutical Society of Orange River Colony.

Cape Colony.

DR. C. F. K. MURRAY has been elected President of the Colonial Medical Council for the three years ending December, 1909.

THE CAPE GOVERNMENT now place telephones on board the mail steamers immediately they are docked at Cape Town. Passengers can now communicate with subscribers throughout the Cape peninsula for a small fee.

PILLS FOR SOUTH AFRICA.—Mr. A. J. Willson, South African representative of Messrs. C. J. Hewlett & Son, London, Eng., has ascertained from the Customs authorities that pills in mass and bulk are subject to 20s. per lb. duty, but non-secret pills, packed for sale, are subject to 15 per cent. *ad valorem*, whilst secret formulæ, packed for sale, are 25 per cent. *ad valorem*.

THE CHEMISTS' TROUBLES.—"A Country Chemist" has been writing to a Colonial paper airing the grievances which he considers afflict his *confrères*. His complaints are that the chemist has to pay two licences (5*l.* each) where the general dealer only pays one; there is also the examination-fee to pay. Chemists in country places get few prescriptions to dispense, and doctors compete with them in selling sundries, and competition with the stores is keen. The correspondent concludes thus:

The Pharmaceutical Society should call all chemists to combined action. It is a sad fact that wholesale chemists are reluctant to offend their G.D. customers, who order so largely of them, by taking action, which might for a while cause them some loss, although such action would in the long run lead to the establishment of a chemist in every village of the Colony, who would, no doubt, be supporters of the wholesale house in the stead of the general dealer.

A SEQUESTRATION.—The report of Mr. Harry Gibson, trustee in the insolvent estate of Edmund Shearer MacKenzie, chemist, Lansdowne Road, Claremont, states that the estate was voluntarily surrendered, the final order of sequestration being granted on November 28, 1906. Claims have been proved to the amount of 257*l.* 4*s.*, and others are expected. The schedules disclose the following position: Liabilities, 581*l.* 17*s.* 3*d.*; assets, 304*l.* 2*s.* 1*d.*; deficiency, 277*l.* 15*s.* 2*d.*. There is no landed property in the estate; the movable assets consist of book-debts, stock and fixtures of a retail chemist's business, and the insolvent's furniture contained in his private residence. The book-debts are receiving attention, but only 4*l.* 8*s.* 2*d.* has been collected to date. It has been arranged to sell the stock and fixtures at public auction. The preference claims for rent exceed 60*l.*, and it is anticipated, therefore, that other creditors will only receive a small dividend, if any. The insolvent gave the fullest information regarding his insolvency before he left Cape Town. He is at present in employment at Oudtshoorn. It appears that the business had suffered from the prevailing depression. The report was adopted.

Orange River Colony.

S.V.M. EXPLOSION.—An alarming explosion occurred in the yard of the Central Pharmacy in Maitland Street, Bloemfontein, on January 11. Some natives were filling bottles of methylated spirit from a cask, and it is thought that one of them was smoking and set fire to the spirit. The burning spirit ran all over the yard and out into the street, where it was smothered with sand. The fire-brigade was promptly on the scene, and the flames were subdued before any great damage was done. The fire-master said that but for the prompt action of Messrs.

Friedmann and Hayes, of the Central Pharmacy, and the neighbouring tradesmen a destructive fire would have ensued.

O.R.C. MEDICAL AND PHARMACY COUNCIL.—At the meeting of this Council, held at Bloemfontein on January 11, Dr. Ramsbottom presided, and there were also present Drs. Pratt-Yule, A. B. Ward, P. A. Gillespie, E. C. S. Daniels (medical); and Messrs. J. Main, J. A. Dinwoodie, and S. S. Hewitt (pharmaceutical); and Mr. Redpath (dental). A letter was read from the Colonial Secretary with reference to the sale of Dutch medicines and the regulations as to the schedule of poisons, intimating that the Government intended to introduce an Ordinance next Session amending the Pharmacy Ordinance of 1904. At the close of the other business (which included questions mainly regarding medical and dental affairs) the Council went into committee to discuss the matter.

Transvaal.

BUSINESS CHANGES.—The new pharmacy in Market Street, Pietersburg, of which the late Mr. M. Kelly was the proprietor, has been taken over by Mr. E. Bannatyne, formerly manager for Mr. Kelly and latterly for the trustees in the estate.—Messrs. Smith, Rive & Co., of Johannesburg, have taken over Mr. J. C. Roller's business in Jeppe's Town, Johannesburg.

Canadian News.

(From the "C. & D." Correspondent.)

THE CONSOLIDATED CHEMICAL Co., of Guelph, Ontario, has decided to open a place of business at Three Rivers, Quebec, this town being more favourably situated for manufacturing and shipping facilities than their present location.

A TAX ON LINSEED.—On January 23 a deputation waited on the Minister of Finance at Ottawa, and asked that a duty of ten cents a bushel be imposed on flax-seed. They represented that owing to a combination in the business, buyers for the linseed-oil manufacturers were able to keep down the price in Ontario, instancing the fact that while flax-seed sold at \$1.24 per bushel in Chicago and \$1.17 in Winnipeg, only \$1.05 could be obtained in Ontario.

DENATURED ALCOHOL.—In the Canadian House of Commons on January 24 the Hon. W. Templeman, Minister of Inland Revenue, made a statement on the Government policy regarding denatured alcohol, stating that the Government still retain a monopoly of the manufacture. It has, under a contract which has one year to run, to pay \$1.29 per gal. for wood alcohol, the denaturing element, although it sells in the market for half that price. The Government has decided to reduce the quantity of the denaturant used from 25 to 10 per cent., which it is hoped will materially reduce the cost.

THE PURE FOOD INSPECTION BILL introduced by Mr. Fisher on behalf of the Government now awaits the third reading, and will come into force on its approval by the Governor-General, but the Governor-in-Council may suspend the operation of any section for any period of time required, but not longer than January 1 next. This is to provide for the use of labels already printed, and which could not be used under the new law. This Bill seems to have been framed somewhat after the one just coming into operation in the United States, but provides more particularly for goods manufactured in Canada, and intended for home consumption and export, having to pass the Government inspection, and not so much to goods coming into the country.

DOCTOR (looking at clinical thermometer after taking patient's temperature): "Hello! This won't do—one hundred and three." GOLFING PATIENT: "What's bogey?"

THE MEMBERS of the Brighton Association of Pharmacy had a whist-drive and a dance at the Old Ship Hotel on Tuesday evening, which were attended by 120 ladies and gentlemen and proved a decided success. The winners of whist prizes were Messrs. Brown, Misses King and Smith, and Messrs. J. Plowright, Gerding (formerly of Singapore), and C. A. Blamey.

Legal Reports.

Trade Law.

What Constitutes Sale?—This question was argued in the King's Bench Division, before Mr. Justice Lawrance and Mr. Justice Ridley, in the case of *Hellwell v. Wheeler*, which was under Section 6 of the Sale of Food and Drugs Act, 1875. An inspector obtained two samples of milk from a boy of sixteen, who was in charge of a milk-cart, and the second sample contained 40 per cent. more water than is normal. The boy told the inspector before the purchase was completed that this was milk consigned to a baker, and the Justices dismissed the summons and declined to state a case. The present application was for a mandamus to compel them to state a case, but their Lordships refused it, saying that if the Justices came to the conclusion that the milk was not intended to be sold, but that the policeman got the boy to sell him some of it, they had a right to come to the conclusion that there was no sale within the section.—It is expected that an allied point in respect to a brandy case will, on appeal of the Holborn Borough Council, come before the High Court. In this case a publican's assistant sold brandy below standard, and the Marlborough Street Magistrate dismissed the summons on the ground that the brandy was sold by the servant, contrary to the instructions of the retailer, who was, therefore, held to be not liable.

The Chemist's Responsibility.—In the Court of Sessions, Edinburgh, on February 6 to 8, argument in the case *Rosen v. Stephen (C. & D., February 2, p. 185)* was heard before Lord Johnston. This is the action in which the father of a girl sues a Dundee pharmaceutical chemist for damages for injuries to the child's head from the application of butter of antimony for ringworm. The question argued before his Lordship ultimately resolved itself into one of the responsibility of the chemist who sells an article to a customer as demanded and gives advice by request as to its use. Mr. Morison, who appeared for the defender, insisted that the action must be legally regarded as one for the child, and as there was no contract of sale between the child and the defender, he questioned the relevancy of the procedure. Moreover, the child could not maintain an action for breach of contract had the goods been defective in quality, which argument his Lordship admitted to be true. This point was argued at considerable length, Mr. Morison citing cases, including the Liverpool hot-water bottle one. Mr. Morison also took three distinct points of relevancy in the record, saying (1) there was not a relevant statement of the advice given; (2) the chemist was not liable for giving advice connected with the remedial properties of his medicine; and (3) it was not the advice that caused the injury to the child, but the application of the remedy by the pursuer himself—that is to say, a third party was interposed between the person injured and the person who gave the advice. Upon these propositions a very long legal discussion ensued between his Lordship and Mr. Morison, which ultimately led to his Lordship stating that the serious questions of law involved precluded the case from going to a jury, and he considered that it should go to proof, but before that could be done certain things on the record had to be altered. Mr. George Watt, K.C., who appeared for pursuer, objected, and another lengthy argument arose. His Lordship told Mr. Watt that he had indicated, partly on record and partly verbally, two possible grounds of action against defender: (1) That he ought not to have sold this article at all, because it was absolutely unsuitable and dangerous for the purpose indicated; and (2) if it was to be sold at his recommendation for a definite purpose, defender should have warned the purchaser of his danger, and instructed him in the use of it. His Lordship said he required proof of these averments on the pursuer's record, and adjourned the hearing.

High Court Cases.

BEECHAM'S PILLS.

BEFORE Mr. Justice Joyce, on February 8, Mr. Martelli, on behalf of Thomas Beecham, St. Helens, moved for an injunction to restrain William E. Clarke, pharmaceutical chemist, 74 High Street, Rochester, and 85 High Street, Strood, from selling, or offering for sale, as Beecham's Pills, any pills that are not of the plaintiff's manufacture. Mr. Martelli said the defendant (for whom Mr. Galbraith appeared) had agreed to treat this hearing as the hearing of the action, and submitted to a perpetual injunction and to pay the costs of the action. His lordship made the order accordingly.

ASSISTANTS' AGREEMENTS.

THE case of the Home and Colonial Stores v. Hawkins came before Mr. Justice Parker in the Chancery Division on

February 9, by way of motion for judgment in default of defence. The defendant had been employed at plaintiffs' Hastings branch under an agreement that he would not within five years of the termination of his employment by them become interested in any business for the sale of tea and butter within five miles of any branch of theirs in any town with a less population than 100,000, or one mile in any town with a greater population, and to be liable to pay 100% agreed damages for any breach of the covenant. In April last he was dismissed, and he is now employed in a similar business at Queen's Road, Hastings. Mr. Vernon, on behalf of plaintiffs, asked for an injunction in the terms of the agreement.

His Lordship pointed out that counsel had omitted to declare that the covenant was not broader than was necessary for the protection of the business. "All these contracts in restraint of trade," he added, "are *prima facie* void. It is only so far as it is necessary to protect your business that they are valid. It is always better to put in the allegation, but I have so often seen it without that you may take the order."

The defendant subsequently came forward and stated that he should like to defend the action.

His Lordship: Your only defence is that the covenant is too broad.

The defendant: So it is from my point of view.

His Lordship: You must look at it from their point of view as well.

The defendant: I do not think they treated me in a proper manner, and that is why I should like to defend.

Mr. Vernon said he had not known that the defendant was in court. He should not oppose an adjournment for a fortnight to enable him to put in a defence.

The case stood over accordingly, no order being made on the motion.

Pharmacy Act, 1868.

SERPENT'S EGGS.

AT Clerkenwell Police Court, on February 8, A. W. Gamage, Ltd., 128 Holborn, E.C., were summoned by the Pharmaceutical Society for selling a box of serpent's eggs containing sulpho-cyanide of mercury, which was not labelled in accordance with section 17 of the Pharmacy Act. The case was heard at Clerkenwell.

Mr. W. S. Glyn-Jones represented the Society; and Mr. S. Fleming appeared for the defendants, who admitted the offence and that the serpent's eggs were sold in the toy department of their warehouse.

Mr. W. S. Glyn-Jones said the defendants had written to the Society explaining that they did not know the contents of the "eggs." But counsel thought it astonishing that so large a firm should be ignorant of the matter. The eggs were highly dangerous, and more than one fatal accident had resulted from children eating them. The Society thought their sale might well be prohibited, but at least they should be sold only under the restrictions applying to the sale of poisons.

Mr. Fleming said for years these things had been sold in shops, and no one in the trade appeared to know of their dangerous nature. The defendants had stopped the sale, and would not sell the eggs until the boxes were duly labelled "Poison."

Mr. D'Eyncourt said the defendants had now acted wisely, but their ignorance rather made things worse. The fond mother purchasing these things for her children would receive the assurance they were perfectly harmless, whereas the vendors knew nothing at all about them. People should understand what they deal in, or have nothing to do with the things. He imposed a fine of 2/., with five guineas costs.

Sale of Food and Drugs Acts.

GENTIAN-POWDER.

AT the North London Police Court, before Mr. Fordham, on February 8, Mr. John Dwyer, chemist and druggist, 128 Ball's Pond Road, N., was summoned under Section 6 of the 1875 Act for selling powdered gentian which Dr. Teed certified to contain 25 per cent. of ground olive-stones. Mr. A. M. Bramall prosecuted, and defendant admitted selling the article, but said he was not aware of the adultera-

tion. The Magistrate asked what gentian is used for, whereupon Mr. Bramall explained how recently ground gentian of this nature has been imported from the Continent, and is called "exot.," or veterinary.

Mr. Fordham: If he had said, when asked for powdered gentian-root, "This is not gentian-root for human beings; it is for horses" before the sale was completed he would not have been guilty; but I understand he did not put on the label until after the sale.

Mr. Bramall: He is a qualified chemist; and I see no reason why the poor animal should not be given the pure article as well as human beings.

Mr. Dwyer then explained that the inspector's boy-messenger had got tincture of rhubarb at the same time, which was all right. When he knew about the gentian being wrong he went to Messrs. Baiss Bros. & Stevenson, from whom he had bought it, and learnt that it was foreign-ground. Some that he had more recently obtained was ground by themselves, they having decided to do that when they learnt that the foreign powder was adulterated. The Magistrate imposed a fine of 10s., and 12s. 6d. costs, saying that he could not overlook the fact that Mr. Dwyer sold the powder as he got it.

SWEET SPIRIT OF NITRE.

At the Clerkenwell Polico Court on February 13, before Mr. J. Bros, Parke's Drug-stores, Ltd., were summoned for selling sweet spirit of nitre which the public analyst certified to be deficient in ethyl nitrite to the extent of 35 per cent. Mr. A. Bramall prosecuted, and Mr. W. S. Glyn-Jones (instructed by Messrs. Neve, Beck & Kirby) represented the defendants.

At the outset of the proceedings Mr. Bramall read the following letter, written by the defendants' managing director to Dr. Harris, medical officer of health for Islington:

January 24, 1907.

DEAR SIR,—I regret to find by Mr. Parry's analysis that the sample of spirit. æther. nit. taken by your inspector from our Islington branch, 251 Upper Street, is deficient of its proper quantity of nitrous æther, as required by the British Pharmacopœia. Our branch manager informs us that it was the last ounce of a pound bottle, and, of course, the amount of floating æther in that bottle would seriously depreciate the strength of the liquid itself.

We make every effort possible to keep this article up to its required strength.

We buy it from a first-class firm, Messrs. A. White & Sons, who pack it in pound bottles, stoppered and luted, and a little over the required strength.

We also regret that you were unable to get 4 oz. as required, on account of our being short of stock at Islington, through the warehouse being closed for Christmas holidays.

It is also regrettable that the 1 oz. should have been divided into three 1-oz. bottles, as a large proportion of the gaseous nitrous æther would escape into the upper part of the bottle, and be lost on removing the stopper.

We trust that you will take these facts into consideration when you get your analyst's report.

We may add that in future, as soon as we can get all our branches supplied, this article will only be sold in 1-oz., 2-oz., and 4-oz. stoppered bottles, so as to further minimise the possibility of a depreciation in strength through the frequent opening of bottles. Yours faithfully,

J. MURISON, Managing Director.

Mr. Bramall commented on the importance of a drug of this nature being of proper strength, and, with reference to Mr. Murison's letter, said chemists are not ordinary tradesmen, but deal in matters of very great importance to the public, who have a right to expect that proper care would be taken that no drug should be deficient to the extent of more than one-third of its active element.

Evidence was then called, William Poulter, a youth, proving the purchase of the drug, and Inspector Ward corroborating and proving the division of the purchase, etc.

Mr. Bramall handed to the Magistrate the "British Pharmacopœia" and the analyst's certificate.

In cross-examination by Mr. Glyn-Jones, the inspector admitted that the bottles into which the purchase was divided were only one-third full, and was questioned as to how the public buy the spirit.

Mr. Bramall, having briefly re-examined witness, pointed out that Squire's "Companion" gives the medicinal properties of sweet spirit of nitre.

Mr. Glyn-Jones said he did not know that his friend

was entitled to put in Squire's "Companion"; the British Pharmacopœia was another matter.

The Magistrate said it seemed such a roundabout way to put questions to a person who knew nothing about the subject. However, Mr. Bramall could quote what he liked.

Mr. Bramall then read the list of properties from Squire.

Mr. Glyn-Jones, in addressing the Magistrate, said sweet spirit of nitre is quite an exceptional article, and it had not been suggested that there had been any attempt on the part of his clients to cheat the public. He submitted that the standard for sweet spirit of nitre under this Act was the article which the purchaser wanted and had a right to expect. The British Pharmacopœia is not, he contended, the standard under the Act, but there is a decision which says that it is *prima facie* a standard, and there are other decisions in which the opposite was held. It is impossible, he said, for the shopkeeper to keep this spirit up to standard, having regard to the number of times it is asked for. What the words in the B.P.—"when it has been occasionally opened"—mean he did not know. The public purchase this article in small quantities, bringing their own bottles, and it is impossible to maintain the standard which the prosecution had stated should be maintained. The public are not entitled to have it freshly prepared, but they are entitled to have it after "the bottle has been occasionally opened." There lies the difficulty. He contended that his friend had no right to say that this article was more than 33½ per cent. deficient in its medicinal value. He submitted that the standard for the article is its strength at the time of sale, for the retailer has to get it from the wholesaler, who has to make it and bottle it. It was straining the Act to come there and say that such a drug should have its strength maintained, unless it is to be kept in hermetically sealed bottles; and it is not, he contended, fair to take an article of this kind, which it is impossible to maintain at any given standard. What the Court had to decide was, What is necessary for the protection and convenience of the public? He submitted in this case that it had not been shown that anything had been done to prejudice the purchaser. He called attention to the decision in *Hudson v. Bridge re vinegar of squills* as being applicable to the present case.

Mr. Ernest J. Parry, B.Sc.Lond., F.I.C., was then called for the defence. He deposed that there is no drug in the Pharmacopœia so difficult to keep as sweet spirit of nitre, and explained its properties very fully in reply to questions put by Mr. Glyn-Jones. It was within his own knowledge that sweet spirit of nitre is generally sold in pennyworths or twopennyworths. He referred to the B.P. allowance, and questioned its sufficiency, as ordinarily a bottle is opened fifty or sixty times. There was nothing to suggest that this sample had been reduced in strength physically and purposely; if it had been watered he would have seen it at once.

The Magistrate said there was no suggestion of that kind. Cross-examined by Mr. Bramall, witness said he also analysed one of the samples, and found it deficient to the extent of 35 per cent. in ethyl nitrite.

The Magistrate: I may here state that the British Pharmacopœia is quite enough for me to-day.

Mr. Bramall said that the drug was highly volatile, and very liable to escape; therefore, chemists ought to adopt special precautions.

The Magistrate said that the witness had admitted that the sample was not up to the standard of the British Pharmacopœia, and he thought the purchaser had something to complain of, if not much. The British Pharmacopœia allows a certain percentage of ethyl nitrite, and, if it is not there, the person asking for it has a right to complain.

Mr. Glyn-Jones submitted that there is no authority which makes the British Pharmacopœia a standard, but, even supposing it is a standard, there is nothing in it as to what the standard should be at the time of sale. If a bottle has been opened once or twice, it has been "occasionally opened," but by selling it in 2-dr. quantities it might be necessary to open the bottle a score of times; therefore, unless it is put up in sealed bottles, the public could not expect to get it at standard strength.

The Magistrate said the view he took was that this article must be kept up to the standard. Whether or not it would be necessary to have only 3-oz. bottles was another matter.

There was no suggestion of any dishonesty in this case, and it was perfectly intelligible that in the course of their extensive business the defendants sold this sample from the very bottom of the bottle. If, instead of serving the purchaser, the assistant had told him to wait until the afternoon, the article then supplied would have been up to the standard. He should merely order the defendants to pay the costs of the analysis.

Mr. Bramall: But, sir, there have been three previous convictions!

The Magistrate: What for?

Mr. Bramall: The same substance, 31½ per cent. deficient.

Mr. Glyn-Jones: We know nothing about that.

Mr. Bramall: It was with reference to the Holloway Road shop.

Mr. Glyn-Jones mentioned that a sample of liquorice-powder was taken at the same time as the sweet spirit of nitre.

The Magistrate: Well, I shall be satisfied if they pay the costs of the analysis.

County Court Case.

MOTOR-SPIRIT CASE.

IN the City of London Court on February 12, the Gaslight Improvement Co., Ltd., of 7 Bishopsgate Street Without, London, E.C., sued Mr. J. Clark, described as a chemist, of 75 West Street, Sheffield, to recover 15*l.* 4*s.* 11*d.*, balance of account for motor-spirit supplied. The defence was that the plaintiffs had charged a higher price than they were justified in doing. The defendant also claimed 6*l.* for certain returned drums. After hearing the evidence on both sides, which showed that the defendant wanted a reduction of 2*d.* per gal. on 1,700 gals., Judge Lumley Smith said he had to decide whether 1*s.* 1*d.* per gal. was the market-price of the spirit last September, and he cut down the plaintiffs' claim and gave them 1*s.* per gal. Judgment was therefore given for the plaintiffs for 11*l.* 14*s.* 1*d.*, to be reduced to 3*l.* 10*s.* 10*d.* when the defendant had returned the drums in dispute, unless they had already been returned.

Bankruptcies and Failures.

Re FREDERICK GEORGE PLUMMER, 2 Silver Street and 143 High Holborn, Manufacturer of "Tusco" dentifrice.—This bankrupt, who failed in March 1905, applied last week to Mr. Registrar Brougham at the London Bankruptcy Court for an order of discharge. The Official Receiver reported that the provable debts amounted to 2,499*l.*, and the assets had realised 40*l.* In 1902 the bankrupt purchased a recipe for a dentifrice, to which he gave the name of "Tusco." He expended hundreds of pounds in advertising the dentifrice and in experimenting on improvements. In 1904 he endeavoured to float the business as a limited-liability company. He borrowed 400*l.* from his bankers under his brother's guarantee for the expenses of the flotation, but only a prospectus was got out, as the necessary capital could not be raised, and in 1904 he assigned the business to his brother, on whose behalf it was sold for 200*l.* The bankrupt attributed his failure to insufficiency of capital to carry the "Tusco" business through, and the Official Receiver alleged that, inasmuch as when he commenced to exploit "Tusco" he had no knowledge of the business, he had contributed to the bankruptcy by rash and hazardous speculation. His Honour upheld the report, and imposed a further suspension of two years.

Re WALTER THOMAS FUGE, 46 High Street, Putney, late 2 High Street, Dorking, Surrey, 105 Canterbury Street, New Brompton, Kent, and 70 Broad Street, Chesham, Bucks, Chemist and Druggist.—In this case the receiving order was made on the debtor's petition on January 28, and the accounts filed show gross liabilities amounting to 646*l.* 18*s.* 3*d.* (unsecured 620*l.* 2*s.* 11*d.*), and assets estimated to realise 192*l.* 9*s.* 8*d.*, after deducting 13*l.* 0*s.* 4*d.* for preference claims. The debtor started trading as a chemist and druggist at Chesham in 1901, borrowing 250*l.* from his father, who has since then advanced him further moneys, and who is now scheduled as an unsecured creditor for 390*l.* After carrying on the business for six months he sold it and removed to New Brompton, staying there for about three years. He was then in Bath for a short time, and in June 1905 he opened a business at Dorking, which he sold for 500*l.* last June. Last September he

took his present premises at Putney on a seven, fourteen, or twenty-one years' lease at 150*l.* a year rent, rising by 10*l.* a year to 200*l.*, and he was carrying on the business at that address when he filed his petition. His wife claims part of the household furniture as her separate property. Debtor has kept a cash-book and creditors' ledger. Most of the unsecured liabilities are for goods supplied. The failure is ascribed by the debtor to insufficient trade at Putney, heavy working expenses, and depreciation in the value of stock and trade effects and utensils, as estimated for realisation. The following are creditors: W. Fuge, Leamington (390*l.*); Baiss Bros. & Stevenson, Ltd. (21*l.*); Butler & Crispe (24*l.*); Ford, Shapland & Co. (18*l.*); Misch & Co. (10*l.*); Wright, Layman & Umney, Ltd. (17*l.*); Gibson & Sons (11*l.*); G. W. Cooper (14*l.*), all of London. Contingent liabilities: E. Bingham, London (13*l.*); rates (13*l.*).

Deed of Arrangement.

AGNEW, JOHN WILLIAM, Carlisle Circus, Belfast, Pharmaceutical Chemist.—Trustee, John Lowther, accountant, Waring Street, Belfast. Dated January 30; filed February 5. Secured creditors, 170*l.*; unsecured liabilities, 1,610*l.*; estimated net assets, 130*l.*

Gazette.

Partnerships Dissolved.

CAMPBELL, W., and STALLARD, N. F., Hastings, physicians and surgeons.

METTHAM, H. J., and METTHAM, B., under the style of H. J. & B. Mettham, Mansfield, Nottinghamshire, mineral-water manufacturers.

The Bankruptcy Acts, 1883 and 1890.

ADJUDICATIONS.

DALY, WILLIAM JOHN, Eastbourne, medical practitioner.

KNIGHT, JOHN WILLIAMS, Southsea, Hants, drug-store proprietor.

New Companies and Company News.

ARTIFICIAL-TEETH AID SOCIETY, LTD.—Capital 500*l.*, in 1*l.* shares. Objects: To establish a central institution in London, with suburban provincial branches, for the supply of artificial teeth, to contract with registered dentists to professionally attend, at their own residences or at local dispensaries, persons nominated by the company or its members and subscribers as being proper persons to be attended gratis or at reduced fees, to manufacture and deal in apparatus and materials used by dentists and others, and to carry on the business of dentists, dental mechanics, manufacturers of artificial teeth, etc. Registered office, 89 New Oxford Street, W.

GLOBE ARTIFICIAL-TEETH INSTITUTE, LTD.—Capital 1,600*l.*, in 10*s.* shares (2,400 preference). Objects: To acquire the business of artificial-teeth manufacturers and adapters, chemists', opticians', and surgical instrument dealers, carried on at 40 Friar Street, Reading, and to carry on the said business. The first subscribers are: S. Arlins, Reading, photographer; A. Houghton, Reading, art-dealer; A. Herbert, Reading, electrical engineer; P. H. Palmer, Reading, printer; R. L. Casson, advertisement contractor; M. H. Solomons, Reading, artificial-teeth manufacturer; and H. Hadin, Reading, foreman. Registered office, 40 Friar Street, Reading.

MR. BACON, LTD.—Registered February 8, with a capital of 1,000*l.*, in 1*l.* shares. Objects: To participate in profits arising from the practice of dentistry by duly qualified practitioners, to undertake the tuition of dentistry, to employ dental surgeons, to promote the science and practice of dentistry, to manufacture dental materials and machinery, to carry on business as dentists and otherwise, etc. The first subscribers are: H. Bacon, Croxall, Ashford, Middlesex, dental surgeon; W. W. Mattingly, secretary; D. J. McIntyre, philatelist; R. G. Pollock, solicitor; G. C. R. Harvey, gentleman; W. S. Scott, gentleman; and F. H. W. Mattingly, assistant buyer.

JOHN CRAMPTON & Co., LTD.—Capital 3,500*l.*, in 1*l.* shares (1,500 preference). Objects: To acquire the business carried on at Hewitt Street, Manchester, as "John Crampton & Co.," to adopt an agreement with J. Crampton and F. W. Pott, and to carry on the business of drysalters, chemists, druggists, exporters, importers, and grinders of and dealers in spices and herbs, etc. The first subscribers are: F. W. Pott, Manchester, spice-grinder; A. Prescott, Manchester, agent; J. Crosby, Sale, tea-merchant; W. J. Anderson, Man-

chester, solicitor; G. L. Stansford, Manchester, C.A.; F. M. Pott, Southport, clerk; and E. L. Sandbach, Manchester, solicitor. The first directors are F. W. Pott, E. Sandbach, and A. Prescott.

JARVIE & CO., LTD., glycerin and chemical manufacturers, Glasgow and Coatbridge, is being wound up voluntarily and the business transferred to a new concern—H. Jarvie & Co., Ltd.

EGYPTIAN SALT AND SODA, LTD.—The directors of this company have decided to issue at par 50,000 new ordinary shares of 1*l.* sterling each, to rank *pari passu* with the existing ordinary shares.

W. B. FORDHAM & SONS, LTD.—The accounts, after provision for depreciation, etc., show a balance which enables the directors to recommend a final dividend at the rate of 5 per cent. per annum, free of income-tax, for the half-year ended December 31 last, making 5 per cent. for the year.

RANDALL & SON, LTD., Chemists, Southampton.—The issue of 5,500*l.* debentures in this company, to which reference was made in these columns a month ago, has been registered at Somerset House. We understand that the issue was several times over subscribed, and the Zion Hill property belonging to the trustees of the late Mr. W. B. Randall has been transferred to the company, which is now entirely its own land-lord.

JOHN OAKLEY & SONS, LTD.—The directors recommend a final dividend of 5 per cent. for the year ended December 31, 1906, to the ordinary shareholders, making a total of 10 per cent. for the year, and in addition a bonus of 5 per cent., free of income-tax. They also recommend that 3,000*l.* be carried to general reserve, raising this fund to 77,000*l.*, making with the capital reserve a total reserve of 80,734*l.*, leaving a balance of 5,208*l.* to be carried forward.

BRITON FERRY CHEMICAL AND MANURE CO., LTD.—The report of this company for 1906 states that the profit obtained during the year amounts to 3,177*l.* This, added to the balance from the previous year of 1,680*l.*, gives a credit balance of 4,857*l.* From this 314*l.* has been paid in income-tax, 390*l.* in an interim dividend of 3*l.* per share, and 1,299*l.* has been credited to the Cape Copper Co. as its share of profit and rent. With the balance, 2,853*l.*, the directors recommend a dividend of 9*l.* per share, making a total dividend of 5 per cent. for the year, leaving 1,681*l.* to be carried forward.

THE TAR (PATENTS) SOLIDIFYING & DISTILLING CO., LTD.—This company has an authorised share capital of 10,000*l.* in 10,000 shares, of which 3,000 are 6-per-cent. preference and 7,000 are ordinary shares. Of these 2,000 ordinary shares have been allotted to the vendors, and 5,000 ordinary shares and 2,993 6-per-cent. preference shares are being offered for subscription at par, payable 1*s.* per share on application, 4*s.* per share on allotment, and balance in monthly calls of 5*s.* each per share. In allotting shares to applicants precedence will be given to shareholders in gas companies and others interested in gas-manufacture, asphalt, patent fuel, and distilling. See the advertisement section for further particulars.

Trade-marks Applied For.

Objections to the registration of any of the undermentioned applications should be lodged with C. N. Dalton, Esq., C.B., Comptroller-General of Patents, Designs, and Trade-marks, at the Patents Office, 25 Southampton Buildings, Chancery Lane, London, W.C., within one month of the dates mentioned. The objection must be stated on Trade-marks Form No. 7, cost 1*s.*, obtainable through any money-order office.

(From the "Trade-marks Journal," January 23, 1907.)

"KLYTIA" and device; for perfumery. By Victor Merle, 25 Place Vendôme, Paris. 287,162.

"LYPTINE"; for dentifrices and salves. By Scott & Bowne, Ltd., 10 Stonecutter Street, London, E.C. 288,531.

"MAJESTIC"; for perfumed soap. By D. Thom & Co., Ltd., Pendleton, Manchester. 288,751.

(From the "Trade-marks Journal," January 30, 1907.)

"DREADNOUGHT"; for disinfecting-soap. By Hanson Bros., Ltd., Royd Mills, Wilsden, Bradford. 289,050.

"SUFFLEX" and device of a crab; for throat-powders. By Wood & Co., 149 Park Lane, Leeds. 286,741.

"VINCOR"; for ointments and pills. By V. Cromack, 381 Park Road, Oldham. 286,950.

"ANDOLIN"; for anaesthetics. By Andolin Ges. m. b. H., Wasserthorstrasse 46, Berlin. 288,118.

"THISIN"; for a consumption preparation. By the Thisin Co., Espérance, Holloway Hill, Godalming. 288,347.

"W. GIBSON" (signature); for embrocations. By W. Gibson, 31 Close, Newcastle-on-Tyne. 288,370.

"BIO-KAINO"; for an ointment. By W. P. Foot, 5 Chestnut Road, Raynes Park, London, S.W. 288,799.

"EGHROLETTI"; for liquorice in Classes 3 and 42. By Evars, Gray & Hood, 5 Great Tower Street, London, E.C. 288,800, 288,801.

"SALYCOL"; for medicines, excluding mineral waters. By Reitmeyer & Co., 63 Crutched Friars, London, E.C. 288,807.

"VEINUM"; for chemicals in Class 3. By J. Gow, 149 High Street, Dumbarton. 289,013.

"ROTAT"; for aerated-water machinery. By Stiles, Ltd., 72 Gray's Inn Road, London, W.C. 287,225.

"KARASINO"; for a hair-grower. By Chemical Mfg. Co., 37 Mary Street, Dublin. 285,839.

"OLIVIAN"; for toilet-soaps. By R. Wilkinson, Beulah Spa, Upper Norwood, London, S.E. 288,528.

"VELMOSA"; for a toilet-article. By Baker & Son, 15 Eastgate Square, Chichester. 288,538.

"CARNALIA"; for perfumery. By F. N. Mercer, 101 Mostyn Street, Llandudno. 288,628.

(From the "Trade-marks Journal," February 6, 1907.)

"VIRIDANTHRENE," "EUCHRYSINE," "BLANKIT," and "OLIVANTHRENE"; for chemicals in Class 1. By Badische Anilin & Soda Fabrik, Ludwigshafen am Rhin. 288,722, 288,724, 288,726, 288,728.

"STERILETTES"; for chemicals in Classes 1 and 2. By Squire & Sons, 413 Oxford Street, London, W. 288,227, 288,228.

"CRAWLEY'S BRONCHORINE"; for a bird-medicine. By Crawley & Co., 8 Arthur Terrace, Nottingham. 287,755.

"FICHTENIN"; for an insecticide. By E. Fichtenau, 421 Franz-Josef Strasse, Friedek, Silesia. 288,487.

"SILCASINE"; for chemicals in Classes 2 and 3. By Reynolds & Branson, Ltd., Leeds. 289,040, 289,041.

"NER-VIGOR" on label device, and "IODOLEINE"; for a medicine, and for chemicals in Class 3. By Anglo-American Pharmaceutical Co., 3 Frith Road, Croydon. 283,834, 289,102.

Business Changes.

Properly authenticated business notices (not being advertisements) are inserted in this section free of charge if promptly communicated to the Editor.

MR. E. WOODWARD, chemist and druggist, has opened a business at 15 Seaforth Road, Seaforth.

MR. W. L. LOTEN, chemist and druggist, of Hull, has opened new premises at 13 Castle Street, Hull.

LONG'S DRUG-STORES, owing to public improvements, have removed from 484 High Road, Tottenham, to No. 457 in the same thoroughfare.

MR. W. H. COOK, chemist and druggist, has taken over the business at Faringdon, Berks, formerly carried on by Mr. F. S. Booth, chemist and druggist.

MR. HAROLD S. YOUNG, chemist and druggist, has bought the business carried on for thirty-seven years at 14 Hospital Street, Nantwich, by Mr. B. Woolstencroft, chemist and druggist.

MR. W. S. CLARK, chemist and druggist, has succeeded to the business of Mr. S. S. Squires at 198 Humberstone Road, Leicester. Mr. Squires was recently appointed to the position of head pharmacist to the Leicester Provident Dispensary. Messrs. Brett & Co. effected the transfer.

MESSRS. DUMOULIN & CO., LTD., have commenced business at 18 Old Swan Lane, Upper Thames Street, London, E.C., as manufacturers, importers, and exporters of essential oils, chemicals, etc. Mr. Edwin Harrison (late of Harrison & Muddiman) and Mr. Walter Blackford (late manager of Mr. Poppelreuter's London dépôt) have joined the company.

MESSRS. F. W. SUTCLIFFE & CO., LTD., store chemists, of Leeds, Oldham, Wakefield, etc., have recently purchased the old-established businesses carried on at Rippenden by Mr. Escroft, at Luddenden Foot by Mr. S. W. Bowness, chemist and druggist, at Stacksteads by Mr. H. W. Merrill, and at Lees, near Oldham, by Mr. James Alfred Buckley, chemist and druggist.

Personalities.

WE understand that Mr. S. R. Atkins, J.P., of Salisbury, will not seek re-election to the Council of the Pharmaceutical Society in May next.

MR. ROBERT BALCH, of Messrs. Scott & Bowne, Ltd., presided at a dinner of the Sphinx Club, which took place on February 13 at the Hotel Cecil, London. The Lord Mayor (Alderman Sir William Treloar) was the guest of the evening.

COUNSEL in the Gamage case, reported in the Legal section of this issue, were an unprecedented combination at the Bar. Mr. Glyn-Jones is a chemist and druggist, and Mr. Samuel Fleming a registered medical practitioner, being M.B., C.M. Edin., and D.P.H.Camb.

MR. F. M. FISK, F.R.G.S., European manager to Messrs. Parke, Davis & Co., left London this week for a business trip to Russia, where his firm's interests advanced greatly during the past year. Mr. Fisk will visit St. Petersburg, Moscow, and Warsaw, and hopes to make the acquaintance of leading pharmacists and medical practitioners.

MR. R. A. ROBINSON, Ph.C., barrister-at-law, recently retired from the staff of the "Pharmaceutical Journal" to assist his father in the Moderate attack on the London County Council, and has now been adopted as one of the Municipal Reform candidates for North-East Bethnal Green at the forthcoming contest. The sitting members are Sir E. A. Cornwall, M.P. (ex-Chairman of the Council), and an exceedingly strong local man, Mr. E. Smith, J.P.

Births.

BAKER.—At 133 Abbey Street, Nuneaton, on February 11, the wife of Charles Ballard Baker, pharmaceutical chemist, of a son.

GILCHRIST.—At Abbey Corner, Kelso, on February 7, the wife of A. Gilchrist, chemist and druggist, of a daughter.

HICKEY.—At 297 Gloucester Road, West Dulwich, on February 11, the wife of Harry Hickey, senior of Messrs. Parke, Davis & Co.'s London representative staff, of a daughter.

JOHNSTON.—At 12 Tenham Avenue, Streatham Hill, S.W., on February 7, the wife of J. W. Johnston (Arthur H. Cox & Co., Ltd.), of a daughter.

STAGG.—At Lyncroft, Tonbridge, on February 9, the wife of Rowland Stuart Stagg (C. R. Harker, Stagg & Morgan, Ltd.) of a daughter.

Marriages.

BATHURST-SIMONS.—On February 5, at Rugby, Ernest Frank Bathurst, pharmaceutical chemist, of Woburn, Beds, to Hilda Simons.

KERR-FEIERTAG.—At St. Brigid's Church, Belfast, on January 26, by the Rev. B. Laventy, C.C., Jas. J. R. Kerr, L.P.S.I., Londonderry, to Mary, youngest daughter of the late Mr. Fabian Feiertag, Belfast.

MANTHORPE-MATCHAM.—At St. Pancras Church, on February 7, Rowland Frederick Walter Manthorpe, of Lowestoft, to Isabel Lilian, daughter of Mr. Edward Matcham, chemist and druggist, of Westgate Street, Ipswich.

MC EWEN-MOLLOY.—At St. Mary's, Bayswater, London, W., on February 6, by the Rev. H. S. Blake, William McEwen, chemist and druggist, 17 Craven Road, Hyde Park, W., to Margarite Eleanor, second youngest daughter of Mr. John Molloy, Dunleer, co. Louth, Ireland.

MILLS-WORFOLK.—At Ikley Wesleyan Church, on February 13, by the Rev. J. A. Clapperton, M.A., Nottingham, and the Rev. P. L. Watchurst, B.D., Ikley, Herbert A. Mills, Ph.C., F.C.S., Dulwich, to Harriet E. Worfolk, chemist and druggist, daughter of Mr. G. W. Worfolk, chemist, Ikley.

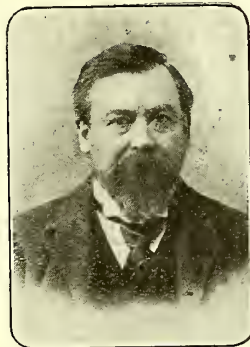
NUGENT-SORDS.—At the Church of the Three Patrons, Rathgar, on February 6, by the Rev. T. Hill, C.C., assisted by the Rev. H. F. Cow, O.M.I., Inchicore, Denis Joseph Nugent, L.P.S.I., to Virginie, youngest daughter of Mr. James Sords, C.E., The Sycamores, Rathgar Road.

Deaths.

BARCLAY.—At 48 Blairgrove, Coatbridge, on February 11, Mr. Hugh Leitch Barclay, aged thirty-five. Mr. Barclay was a chemist's assistant, and also acted as a demonstrator in chemistry in the Coatbridge Technical College.

HARTZ.—On February 11, at 11 Jeffreys Road, Clapham, S.W., Mr. William Hartz, aged ninety-two. Mr. Hartz acted as agent for the Red Lion Wharf, and was well known and highly respected in Mincing Lane and in the Commercial Sale-rooms. The deceased succumbed to injuries which he received in a cab-accident while crossing Lombard Street on Saturday last.

KIRK.—The death of Mr. Snowden Kirk was briefly noted in last week's issue. Mr. Kirk for forty years was in business at 6 Chrisp Street and 86 Upper North Street, Poplar, E., from which he retired in 1904. Mr. Kirk was in his sixty-second year. He was the successor in business of his father-in-law, Dr. G. C. Kernot, and during his residence in Poplar he did a great deal of benevolent work. He sold the business in 1904 to Mr. A. R. Keith and retired to Hastings, where he had had a house for twenty years. The interment took place at Hastings Cemetery on Friday, February 8. Among the mourners were Mr. L. Potts (Town Clerk of Poplar), Mr. Brown (electrical engineer, Walthamstow, son-in-law), Mr. Potts, jun. (son-in-law), Mr. A. R. Keith, Mr. Wm. Kernot, Mr. George Kirk (the only son, who is qualifying as a surgeon-dentist), and many brother Freemasons. Prior to the interment a service was held in the Congregational Chapel, conducted by the Rev. Mr. Cooper. Mr. Kirk leaves a widow, three daughters, and one son.



MOULDEN.—The death took place at Blackburn, on February 10, of Mr. William Moulden, a well-known figure among the chemists and druggists of East Lancashire. Mr. Moulden, who was in his eighty-third year, was born at Samlesbury, near Blackburn, and he served his apprenticeship with the late Mr. Lawrence Fish, chemist, of Darwin Street, Blackburn. In later years he was with the late Mr. Wm. Farnworth, of King William Street. He retired some thirteen years ago, and had since lived a quiet life. He was a bachelor. The interment took place at Samlesbury Church on February 14.

SMITHELLS.—At Far Headingley, Leeds, on February 7, Constance Marie, wife of Professor Arthur Smithells, F.R.S.

Recent Wills.

COWBURN.—The will of the late Mr. William Cowburn, chemical-manufacturer, of 29 Princess Street, Manchester, who died on December 22, 1906, has been proved at 6,231l. gross.

MR. JOSEPH STAPLETON, analytical chemist, Dublin, who died on April 16, 1906, left personal estate in the United Kingdom valued at 774l. 13s. 11d., of which 494l. 3s. 11d. is English estate.

MR. ALEXANDER LOVE BIGGART, a partner in the Western Chemical Co., Greenock, who died at Craigmores, Rothesay, on May 30, 1906, left personal estate in the United Kingdom valued at 7,547l. 18s. 3d.

MR. THOMAS SEBASTIAN DAVIS, F.C.S., F.R.M.S., 199 South Lambeth Road, S.W., who died on December 30 last, aged seventy-eight years, left estate of the value of 6,023l. 11s. 7d. gross and 5,952l. 13s. net.

MR. GEORGE ROBERT FISHER, chemist, Leamington, who died on January 7, left estate of the gross value of 2,260l. 16s. 5d., with net personalty 1,988l. 13s. 10d.

MR. FREDERICK HAYES, chemist and druggist, Leeds, who died on December 29 last, left estate valued at 896l. 7s. gross, with net personalty 770l. 5s. 5d.

Pharmaceutical Society of Ireland.

COUNCIL-MEETING.

THE Council met at the Society's House, 67 Lower Mount Street, Dublin, on Wednesday, February 6, Dr. J. A. Walsh (President) in the chair. The other members present were Mr. Smith (Vice-President) and Messrs. Thomas Batt, G. D. Beggs (Hon. Treasurer), C. P. Fairweather, H. V. Golden, W. J. Hardy, W. V. Johnston, J. Michie, H. S. Misstear, D. M. Watson, and W. F. Wells.

A HARK BACK.

The PRESIDENT said they had no meeting in November, owing to the want of a quorum, and at the last meeting in January he omitted to mention that the Pharmacy and Poisons Bill was among the Bills that were slaughtered at the end of the Session. But, lest a similar Bill should be brought forward again, they would have to keep their loins girt. He wished to mention now that the deputation who went to the House of Commons about the Bill received very great courtesy from, he might say, all the members whom they interviewed, and he would particularly name Mr. P. A. Meehan, of Maryborough, and Mr. T. F. Smyth, both of whom spoke to as many other of the Nationalist members as they could, espoused their cause very warmly, and put down several blocking amendments in relation to the Bill. It was probably because the Government saw that some time would be lost over the Bill if it was pressed forward that it was slaughtered. They had already sent letters of thanks to some members of the House of Lords from whom they had received great help. When they had to do with that House the Marquis of Hamilton, a member of the House of Commons, was the first man whom they interviewed, and he put them on the right track and enabled them to do what they had accomplished in the House of Lords. They had already publicly acknowledged their indebtedness to him. The President also referred to

CHEMISTS AND WINE-LICENCES.

A great flutter had been caused by the announcement that all pharmacists and chemists and druggists who had wine-licences would be required under the new Act to close their places of business at ten o'clock on Saturday nights, and he believed that they would not be allowed to have them open on Sundays at all. This would be a very great inconvenience. He thought it was scarcely the intention of the Legislature that pharmacists and chemists should be obliged to close up in that way, and it would be a matter for them to consider whether it was worth their while to take out wine-licences at all under the circumstances.

LECTURES IN CHEMISTRY.

A letter from Dr. Ashe, professor of materia medica, was read, in which he strongly urged that students should attend lectures in chemistry before they commence their course in materia medica and botany.

The PRESIDENT said this is a matter with respect to which it would be good for the Council to advise the students, but he did not think it would be advisable for the former to make a ruling. It might inflict a hardship upon those who happened to be in the position of being able to take out the botany course but unable to take out the chemistry during any particular session. In reply to a question from Mr. Watson, the President said there are no botany students at present. Two men applied, but when they heard that they were the only two they said they would wait until next session.

Mr. WELLS said their experience in the past had been that a great many of the students who attended the practical chemistry class had no knowledge whatever of theoretical chemistry. Some years ago the Council tried to make it compulsory on their students to take out lectures in theoretical chemistry first—as is at present the rule in the Kevin Street School—but the Castle would not sanction it. The result was that after carrying on the teaching of theoretical chemistry for some time at considerable loss they had to close the school. But there was a great deal in what Dr. Ashe said, and if the Council did not make a compulsory rule in the subject, they should advise the students about it. One or two students had told him that they would rather

wait until the summer time, when they could get the garden lectures in botany.

Mr. MICHIE said his experience is that most of the students take out the chemistry lectures first and the botany course afterwards. In cases where the students could not do so it would be hard to compel them by a rule, but it would be wise to recommend them to take out their chemistry lectures first where it is possible to do so.

Mr. BEGGS: I have great pleasure in moving that we recommend them to take out the chemistry course before that in botany and materia medica.

Mr. WELLS seconded the motion, which was unanimously agreed to.

NOT RECOGNISED.

A letter was received from the Committee of Management of the Conjoint examinations of the Royal Colleges of Physicians and Surgeons in Ireland, stating that they could not recognise the lectures of the Pharmaceutical Society.

The PRESIDENT: Some of our country members would not rest satisfied with things as they were, but pressed for a written opinion from the committee, and now we have got it.

Mr. WELLS remarked that Sir Charles Cameron had been very friendly to the Council in the matter.

DONATIONS

were received from the Under-Secretary of State for the Colonies of a copy of the Medical and Pharmacy Register for the Orange River Colony; from the Assistant Secretary of the British Pharmaceutical Conference of a copy of the "Year-book" for 1906; and from the Director of the Missouri Botanical Garden of a copy of their seventeenth report, 1906. On the motion of Mr. BEGGS, seconded by Mr. GOLDEN, thanks were voted to the donors.

ELECTIONS.

An election was held for an examiner to conduct the examination of Assistants to Pharmaceutical Chemists. Some members of the Council complained that only one of the five candidates had given his experience and furnished testimonials, in consequence of which the Council were placed at a disadvantage in judging of the qualifications of the candidates. Mr. Fawcett Maxwell, M.P.S.I., Dalkey, was elected to the position.

The following were elected members of the Society: Mr. W. H. Ashmore, Bagenalstown, co. Carlow; Mr. T. Mather Thomson, Dublin; and Mr. T. P. Whelehan, Mullingar.

The following were elected associate druggists: Mr. John Frackelton, Bangor, co. Down; and Mr. A. Harding, Dublin.

The following were nominated for membership: Messrs. Thomas Montgomery, Dublin; Robert Morrison Park, Dublin; J. Ernest Scott, Greystones, co. Dublin; and Joseph Gorry, Naas.

The following were nominated for election as associate druggists: Messrs. Samuel Gibson, Dunmanway, co. Antrim; W. James Rankin, Belfast; and Daniel Lynch, Portumna.

The Council then adjourned.

The Week's Poisonings.

TEN deaths by poison have occurred during the past week, two being returned as misadventures. One out of the four deaths from laudanum in overdose was found to be a misadventure. The other laudanum deaths were those of Edward McMillan, an out-of-work ship's steward in Glasgow; James Needham, a Sheffield tool-maker; and Charlotte Lemon, of Belfast.—Strychnine caused the death of Mary Hannah Royle (16), of Guisborough. A bottle of strychnine was kept in the house, it having been used by the girl's father for destroying vermin, he being a game-keeper.—Four fatalities were the result of carbolic-acid poisoning. The victims were Louisa Pavell (19), a domestic servant at Putney; Leah Eliza Woodiwiss (18), a domestic servant at Wheatley, Doncaster; William Henry Barnes (42), a Wimbledon bricklayer; and James Donovan, of Belfast.—The only unscheduled poison was salt of lemon, taken by Elizabeth Georgeson, a young married woman of Liverpool.

Belladonna for Laudanum.

Resumed hearing of the charge of manslaughter against a Battersea chemist. Belladonna liniment had been given in defendant's shop instead of laudanum. A woman (Mrs. Morris) took it and died. The Coroner's inquest was reported in our issues of January 19, p. 77, and January 26, p. 123. The first hearing of the charge against the chemist was reported in our issue of February 2, p. 183, when Mr. Arthur Gill prosecuted on behalf of the Treasury. Dr. C. H. Flide, who attended Mrs. Morris, and Kate F. Dwyer, a little girl who bought the laudanum for her, gave evidence. The case is regarded as one of exceptional importance to the retail drug-trade, and Messrs. Flux, Thompson & Quarrell, solicitors to the Pharmaceutical Society, briefed Mr. W. S. Glyn-Jones to watch the case on behalf of the Society. Mr. Glyn-Jones was present in court for a short time only on February 8, when the hearing was resumed, being engaged elsewhere; but Mr. Quarrell stayed throughout the rather tedious hearing.

AT the South-Western Police Court on Friday, February 8, before the Hon. John de Grey, Mr. George Frederick Handel Bartlett, chemist and druggist, 38 Battersea Park Road, London, S.W., surrendered to his bail to further answer the charge of causing the death of Mary Elizabeth Morris by belladonna-poisoning. Mr. Arthur Gill again prosecuted for the Treasury, Mr. Hanne appeared for the accused, and Mr. W. S. Glyn-Jones, barrister-at-law, and Mr. W. H. Quarrell (Flux, Thompson & Quarrell) watched the proceedings on behalf of the Pharmaceutical Society of Great Britain. The defendant being very deaf, the evidence was repeated to him by the gaoler.

John William Patrick Suter, aged 15½ years, of 11 Russell Street, Battersea Park Road, was the first witness called. He stated that he was in the employment of Mr. Bartlett until the Saturday before he gave evidence at the Coroner's court. He left the service then. His work was to fill the bottles, but not those containing poisons. His other duties were to put up the stock, such as liquorice-powder, Epsom salts, etc. When it was necessary to refill the poison-bottles Mr. Bartlett would either go down into the cellar and get the bottle himself or he would give a boy a piece of paper with the name of the bottle he required upon it.

The Magistrate: What do you mean by that?—The name of the stuff the bottle contained.

Witness went on to explain that a boy would bring up the bottle and give it to Mr. Bartlett, who would fill the shop-bottle himself. The poisons were stored in the cellar. Witness only served when the assistant (Silke) was away. On Thursday, January 3, he was serving behind the counter from five o'clock until closing-time, 10 p.m. Silke was not there at all during that time. Mr. Bartlett was at his desk. At about a quarter-past five witness served a woman with a pennyworth of laudanum from the 10-oz. shop-bottle produced. (This bottle had been referred to as a 6-oz. bottle by Mr. Gill, but witness corrected counsel. The bottle had a metallic poison-guard round the neck, otherwise was an ordinary gold-labelled shop-round.) It happened to be the last drop in the bottle. At this time Mr. Bartlett was at his desk writing, and witness was attending to all the customers who were in the shop at the time—seven or eight in number. Mr. Bartlett attended to none. When the lady asked for a pennyworth of laudanum she gave him a small blue bottle, which he carried in his right hand to where the shop-bottle was kept. He then took the large bottle down from the shelf, poured out a pennyworth of laudanum into the small blue bottle, wrapped it up, and gave it to the customer, who handed him a penny, which he left on the till. He saw that the small bottle was labelled "Laudanum." When he had emptied the shop-bottle he put it back on the shelf. He had mentioned everything he did in connection with the sale of that pennyworth of laudanum. During all this time Mr. Bartlett appeared to be at his desk. Witness neither spoke to him nor drew his attention to what he was doing. He did not know when laudanum had been sold previously, nor could he say whether any had been sold out of the bottle that day. The shop-bottle was supposed to be refilled every day, and if it had wanted filling it would have been done in the morning. It was Mr. Bartlett's practice to fill the poison-bottles every morning at about 8.30. He had

no idea as to how much laudanum would be sold every day, but he had seen the bottle emptied, though not in one day. Some laudanum was sold every day. On the evening of January 3, after he had emptied the bottle he served all the customers and gave the bottle to the boy Kitchen, and asked him to fill it with tinct. opii, saying, "Be sure the name is on the bottle downstairs." Mr. Bartlett was still at his desk, and witness was about three yards from him. The shop-bottle was beside Mr. Bartlett, but higher up, and witness, in getting it, would almost touch his employer. When he got the bottle down to serve the lady he almost touched Mr. Bartlett, and so he did when he got it down for Kitchen. Besides laudanum, the oils were kept on the same shelf. When he took down the empty bottle he walked about three yards away from Mr. Bartlett to the end of the counter. He spoke in a low voice when he told Kitchen to fill it, but he could give no reason for so doing. The shelf was about six feet from the ground, and witness reached it without getting on anything. He was three or four yards from Mr. Bartlett when he handed the bottle to Kitchen, who went straight downstairs with it. After a little interval he came back with the bottle refilled with something dark brown in colour. Witness was still in the same spot as when he gave him the bottle. When witness replaced the bottle on the shelf he was within five inches of Mr. Bartlett; no customers were in the shop at the time. No one else came in for laudanum that evening. The bottle was on the second shelf, and there was another poison-bottle kept underneath it. Mr. Bartlett had warned him never to sell any laudanum, the last time about two or three weeks before this occurred. His instructions were that he was always to tell him (Mr. Bartlett) when poisons were asked for, and he would serve them himself. Mr. Bartlett had always had something to do with a sale of laudanum. Except on this evening of January 3, he never sold laudanum without first mentioning it to Mr. Bartlett. When he used to serve it, Mr. Bartlett would watch him pouring it out into the other bottle. The defendant had served it as well. He did not in any way try to conceal the fact that he was serving the pennyworth in question. Mr. Bartlett had his back to him, writing. By that witness did not mean that he was standing immediately behind him.

By Mr. Hanne: Witness was learning the business. He recollected that he was standing at the end of the counter when Kitchen brought up the refilled bottle, near the screen. Kitchen was a boy of fourteen. It was not because witness was tired that he asked Kitchen to refill the bottle, nor because he was lazy. He had never sent him down before. Witness had been working for Mr. Bartlett for two and a half years, and Kitchen had been there some months. This was the first time he had ever sent him down for anything. He could not explain why he sent him down on this occasion. Mr. Bartlett would not have allowed him to go down if he had known it. Mr. Bartlett had never told him not to send the boys down for poisons, nor had he ever known him to do so. He had neither told him to send a boy down or not to do so. When he wanted a poison he gave his orders direct. Witness had now and again seen Mr. Bartlett refill the bottles in the morning. Laudanum would last a long time without requiring refilling. Witness used to arrive at the shop at 9.20, and the bottles would have been refilled before he got there. The large bottle of belladonna liniment was kept downstairs; the poisons were mostly kept in one place. There were a certain number of poison-bottles for each compartment in the cellar. The tincture of opium was kept in a large blue bottle, and belladonna was kept in the next compartment in a large white one, labelled "Lin. Belladonnæ Meth." There was plenty of light in the cellar.

When you sold that last pennyworth of laudanum how is it that you can recollect that there were seven or eight people in the shop?—There was nothing to particularly fix it in my mind. It is very usual for seven or eight persons to be in the shop at one time. Mr. Bartlett was writing at his desk while I attended to all the customers, but I do not suppose he saw how many customers were in the shop. They were nearly all small things that were wanted.

Supposing you were standing in the shop by the till, could you see Mr. Bartlett writing at his desk?—Not if he was writing, sir.

Answering further questions, the witness said paregoric

was kept under the laudanum-bottle; that was labelled "Tinct. Camph. Co." More laudanum and paregoric was sold than anything else. If he were going to take down the tinct. opii bottle he would not be more than five inches from Mr. Bartlett. (He measured five inches with his hands.) If he took down the bottle with his right hand he would be facing Mr. Bartlett, but if with his left hand he would have his back to him.

Re-examined by Mr. Gill: He had no conversation with Mr. Bartlett while Kitchen had gone downstairs for the laudanum, nor was he speaking to him when he brought the bottle up. When Mr. Bartlett told him never to refill bottles he mentioned that he always did it himself at 8.30, when the shop was opened, but when he (witness) arrived at 9.20 he never noticed whether the bottles had been refilled.

Dr. Ivor Back, house physician at St. George's Hospital, described the condition of the deceased upon her admission on the night of January 4, and said she died on the 5th. An autopsy showed that death was due to the ingestion of belladonna. The clinical symptoms were so definite that there was no doubt that belladonna was the active agent. He thought it was quite possible that belladonna would have been found in the stomach. No analysis had been made of the stomach-contents, but they had been preserved.

Cross-examined by Mr. Hanne: He received a letter from Dr. Elide with the deceased when she was admitted, stating that the case was one of camphor-poisoning—that the deceased had taken belladonna liniment in mistake for laudanum in her beer. No emetic was given in the hospital. Dr. Elide's treatment of the patient in the earlier stages was very proper. An injection of strychnine would be very beneficial if the patient were collapsed, and apomorphine was a good emetic. There was no possibility of strychnine having increased the strain on the heart. He made no analysis of the stomach-contents because one was not ordered. Seeing that the woman took the belladonna at midday, and she was not admitted into the hospital until 10 P.M., the need for an emetic had passed off, as the substance she had taken had passed into the intestines; moreover, she was delirious, and it was thought that the irritation of passing a stomach-tube would have produced more danger. One drachm of belladonna liniment had been known to kill a normal person, but half a drachm would be a dangerous dose for a healthy person.

Mr. Gill said he did not know whether there would be any dispute as to what was the operative agent; but, as they had heard, the stomach-contents were still available for an analysis.

Replying to Mr. Gill, Dr. Back said he was of opinion that any poison the deceased took would have passed into the intestines within ten hours.

Dr. William Henry Wilcox, M.D., M.R.C.P., Lecturer on Forensic Medicine at St. Mary's Hospital, and scientific analyst to the Home Office, produced an 8-oz. medicine-bottle, corked and labelled "A," which, he said, he received from Detective-sergeant Barrell; also the little blue poison-bottle, which he had marked "B." The larger bottle contained about 2½ oz. of a brown, turbid liquid, smelling strongly of camphor. He made an analysis of this, and found that beer was present, also camphor and the active principles of belladonna. This would correspond to the addition of liniment of belladonna to beer. There was also present a trace of opium, which would be accounted for by some of the mixture coming from a bottle which had contained opium. The smaller bottle, which bore the name of a chemist, contained about twelve drops of a brown liquid smelling of camphor and spirit. Upon making an analysis of this he found camphor, alcohol, the active principles of belladonna, and a trace of opium. The liquid would correspond to the liniment of belladonna, with a little laudanum mixed with it. Liniment of belladonna contains, he added, 50 per cent. of liquid extract of belladonna, of which the maximum dose is one drop; therefore, if taken internally, the maximum dose of liniment of belladonna would be two drops. It is on record that a drachm of liniment of belladonna has killed, but, in his opinion, half a drachm would be a dangerous dose for a healthy person to take, and it would be quite likely to cause death in a person suffering from fatty degeneration of the heart.

At this juncture the case was again adjourned for a week.

Westminster Wisdom.

(From our Parliamentary Representative.)

OUTLOOK OF THE SESSION.

Parliament reassembled on Tuesday, but it is too early yet to gauge with any certainty what the Session is likely to produce in the matter either of the Poisons and Pharmacy Bill or the Government's Poisons Bill. Whether the Government will reintroduce the latter, and, if so, in which Chamber it will first see the light, are matters which at present are shrouded in uncertainty. The Bill is not of course mentioned in the King's Speech from the Throne. It is probable that this year, as last, no decision as to the introduction of the Bill will be come to at once.

As regards the prospects of the Poisons and Pharmacy Bill, it will probably be possible to speak with some measure of certainty next week. The ballot for the order of precedence for private members' Bills is taking place to-day (Thursday), but it will not be known officially till the House meets to-morrow (Friday) afternoon whether the Bill has secured a favourable position. It is known that others besides Mr. Winfrey and Mr. Idris are balloting for it. But it often happens that when a member ballots he has been asked to take charge of more than one measure, and often does not come to any decision as to which he will take up until after he learns what luck he has had in this Parliamentary sweepstake.

THE DEBATE ON THE ADDRESS.

The debate on the Address in the House of Commons is expected to last through the whole of next week, and possibly will run on into the week following. Notice has been given of a large number of amendments, including three which express regret that the Government does not propose any repeal of the penal clauses of the Vaccination Acts.

FOOD REGULATIONS.

Mr. John Burns has given notice of presentation of the Bill introduced last Session to enable regulations to be made for the importation, preparation, storage, and distribution of articles of food.

THE SOCIETY OF APOTHECARIES' BILL.

I understand that during the Recess the Bill promoted by the Society of Apothecaries of London for power to substitute for the title, "Licentiate of the Society of Apothecaries, London," that of "Licentiate in Medicine and Surgery of the Society of Apothecaries, London," and for other purposes, duly passed the Examiners of Private Bills, and now stands for first reading in the House.

PATENT-LAW REFORM.

This subject was mentioned in the King's Speech, and little delay is likely to occur in the presentation by the President of the Board of Trade of the measure promised for compelling the working in England of foreign patents registered in this country. It is probable that the Bill will prove almost non-contentious from the political point of view.

SPOTTED FEVER.

Mr. John Burns, in reply to a question by Sir Francis Channing regarding the notification of spotted fever, states that the Local Government Board issued a circular to local authorities, in August 1905, enclosing a memorandum, which had been prepared by their medical officer, on the subject of cerebro-spinal fever. In that circular the Board intimated that they would be prepared to consider any application made to them by a sanitary authority for their approval to an extension of the provisions of the Infectious Disease (Notification) Act, 1889, to that disease for a limited period.

MANJAK.—According to Mr. P. Carmody, F.I.C., of Trinidad ("Chambers's Journal," February 1, 1907). Manjak, is a very pure form of asphalt, imported from Barbados. In outward appearance it somewhat resembles coal. There are two mines in Trinidad, now being worked to a depth of about 200 ft. The uses for which manjak is suitable are electrical insulation, waterproofing cloth or paper, and the manufacture of superior black varnishes.

Observations and Reflections.

By XRAYSER.

The Tax on Medicinal Specialities

is not to be imposed in France—at least, for the present. I hope it will not endanger the *entente* to express a little disappointment at this pharmaceutical victory. Perhaps it is somewhat like the fox who had lost his tail and who set himself to convince the other foxes of the convenience and comfort of his new condition; but it would have been interesting to watch the working of the tax from its inception with the superior feeling which our century's experience would have inspired. Probably, too, it might have been a blessing in disguise to French pharmacists themselves. The speciality trade is very large with them, and they are always ready to aver that it is throttling genuine pharmacy. It is not certain that the tax would diminish that trade, but their associations insist that it would. Moreover, they profess to be convinced that the tax would fall on them, and their orators in the Chamber made much use of that contention, then coolly passed on to excite compassion with the poor sick people who were to be the victims of the Finance Minister's voracity. Most likely the tax will come, perhaps comprehending proprietary goods generally. The Government must have revenue; every million, even of francs, helps; and the tax is in general harmony with the spirit of French finance.

The Suspension of Hostilities,

advocated by Mr. James Reid would not be bad, from our point of view, if the year's delay would only kindly serve as an "oblivious Lethean gulf" wherein could be buried and forgotten our recent policy. For our ex-leader, Mr. R. A. Robinson, with the general approval and support of his constituency—let this in fairness be admitted—did abandon the aggressive tactics of the previous three years, did practically accept, on behalf of pharmacists, the Government Poisons Bill on the sole condition of the reservation of the designation, and did thus and thereby so tie our hands that in a Select Committee, if one should be conceded, our 1906 views will certainly be quoted against us, and all that will be left for our advocates to do will be to mildly expostulate against the objectionable features of the Bill in a tone which may be deprecatory, but must be resigned.

Mendeléeff's Fame

as a scientific seer is firmly established by contemporary opinion, and is no doubt well deserved. That he was gifted with keen insight and the faculty of presenting his ideas with brilliant force, will not be denied by anyone who has studied his works, even in translations. But there is an opening for a competent chemist to question whether the scientific historians of the future will place Mendeléeff in the very front rank of the great men whose fame rests principally on the services they have rendered by co-ordinating acquired facts into systems; such thinkers, for example, as Copernicus, Newton, Lavoisier, Dalton, and Darwin. Mendeléeff's claim to any such recognition must depend upon his association with the Periodic Law; a conception of great interest, and one which may prove to be fruitful in further discoveries. Mendeléeff accumulated the evidence for this law with great enthusiasm and labour; but it cannot be said that he discovered it. Wherein, except in elaboration, the demonstration of the Periodic Law differs from

The Law of Octaves,

formulated five years previously by Newlands, has never yet been shown, and scientists endowed with the sense of harmony are entitled to regret that the designation of the "law" suggested by the English chemist did not prevail. Mendeléeff scored heavily when, a few years after the promulgation of his periodic law, the first of his hypothetical elements, the one which he had provisionally called ekaluminium, was actually discovered by Lecoq du Boisbaudran, who called it gallium. It fulfilled with fair accuracy the characteristics forecasted for it, and then it was that the "law" was generally accepted. Newlands was not the only anticipator of Mendeléeff. The Russian chemist himself coupled with him a French chemist named De Chancourtois, and in fact the theory or some approach to it had been in the air since 1815, when the once-famous "Prout's hypothesis" was first sketched. This at first assumed that hydrogen was the "protyle" of creation, and that all the other elements were condensations of it. Prout subsequently imagined that hydrogen might itself be a condensation of "some body lower down in the scale." Long afterwards Dumas vigorously championed "Prout's hypothesis," and Mendeléeff himself, in his speculations on ether as the original element, re-incarnated it. It is not impossible that future investigations may establish the truth of Mendeléeff's latest and most daring flight of fancy, and that his ultimate scientific glory may depend rather on his enlistment of the ether among the elements than on his periodic law.

The Twelve Pounds Ten and Threepenny Meeting

of delegates of local associations which is to be held shortly as an experimental essay in the scheme of harnessing these bodies to the Bloomsbury car is a not unskilful, though perhaps a rather ungrateful, attempt to acquire the goodwill of the organisation lately, and perhaps still, trading under the style and title of the Federation. Such is the reward of persistent loyalty. The Federation held out and recommended itself as a provider for the Pharmaceutical Society, and some of its constituent associations came to question the need for a middleman in such a transaction. They conceived the idea that they might themselves approach the throne, and the throne seems to have scented business in this disposition. Whether any formal linking-up of local associations with the central authority is contemplated or not is not yet apparent, but allusions to the delegates as "missionaries of Empire" seem to favour the notion.

Schemes of Organisation

of this kind have a fatal fascination for certain minds. It strikes the official theorist as the proper method of ruling for the man at the top to sit in an armchair and by touching buttons set in motion an army of near and distant subordinates. To compare great things with small ones, it was in this way that the Second Empire of France worked the Departmental scheme which had been framed by the National Assembly in 1789. At the head of the departments were the préfets, then came the arrondissements with their sub-préfets, the cantons with their magistrates, and the communes with their mayors. The Minister of the Interior tried to hold the reins controlling all of these, and the organisation worked marvellously well while things were prosperous. But its weakness lay in the assumption that all the brains were concentrated in the central office, which is never the case. The ideal British system, which is anti-official, consists in encouraging every section to think for itself, and then to accept the composite image which all these thinking sections evolve as the controlling power. It is possible to apply the parable to pharmacy.

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Editorial Comments.

Poisons in 1905.

If there is to be any legislation during this Session of Parliament in regard to pharmacy and poisons law in Great Britain, the report of the Registrar-General for England and Wales covering the year 1905 will be of some value to those who actually have to do the legislation. The Select Committee of the House of Commons which in 1865 so strongly recommended the control of the sale of poisons was equally strong in recommending that retail vendors thereof should be examined and registered. The Registrar-General's report shows to what extent violent deaths by accident are due to poisons and poisonous vapours, the figures for the past five years being as follows:

	1901	1902	1903	1904	1905
Males, number ...	515	495	458	520	510
" proportion per million ...	16	15	14	15	15
Females, number ...	305	334	290	324	312
" proportion per million ...	19	21	18	20	19

Similar statistics are not given for suicides, but we have made the following analyses from other tables in the report:

Total number of deaths from poison and poisonous vapours ...	1,220
Including accidents ...	510
Suicides ...	710

When the figures are further looked into it is found that not one-half of the deaths are due to substances scheduled

under the Pharmacy Act, 1868, as the following figures show, these including both accidents and suicides :

Scheduled poisons :	
On Part 1	138
On Part 2	486
Chemical and medicinal substances unscheduled ...	210
Gases and vapours	120
By anæsthesia	155
Not specified	97
Non-medicinal	14

We give in the next column a list of the substances which caused the fatalities, and we call attention to the fact that the precautions of Part 1 of the Schedule are singularly efficacious, not a single death during 1905 being attributed to four of the twelve substances then specifically scheduled in that part—namely, cantharides, emetic tartar, ergot of rye, and savin. These drugs were scheduled to prevent their illicit use, and the provisions of the Act have been singularly efficacious in stopping such use. In regard to suicides, a significant feature is the very large proportion of fatalities with industrial or technical poisons. No fewer than 379 out of 710 deaths were due to mineral acids, oxalic acid, carbolic acid, and potassium cyanide. In regard to these there is either no control of the sale, or the fact that the articles are used for non-medicinal purposes, or are bought wholesale, makes the conditions of vending less stringent than in the case of medicinal poisons. Thus potassium cyanide is used by suicides who have access to it industrially or technically. It was hoped that the scheduling of carbolic acid in July 1900 would materially diminish the number of deaths from this horrible poison, but except that accidental deaths have slightly decreased, the scheduling has had little effect. We give the figures for the past five years, and place alongside them those for hydrochloric and oxalic acids :

—	1901	1902	1903	1904	1905
<i>Accidents—</i>					
Carbolic acid	33	22	20	27	31
Hydrochloric acid ...	12	14	10	14	11
Oxalic acid	7	9	7	13	11
<i>Suicides—</i>					
Carbolic acid	142	140	141	138	157
Hydrochloric acid ...	50	43	45	61	73
Oxalic acid	72	64	89	110	107

In 1900 there were 170 deaths from carbolic acid, of which 134 were suicides. It is apparent that the common use of these substances creates freedom in their sale, which makes them readily accessible. Besides, the Pharmaceutical Society has an unenviable duty to perform in stopping the sale of carbolic and oxalic acids by unqualified persons (an all too common practice). It is not deemed to be desirable to do anything which may seem to interfere with public convenience, or which may be interpreted as fostering a monopoly—and there is a constant "terror," so to speak, of the supreme authority (the Privy Council) looking upon the Society with suspicion. Nevertheless, it is desirable that more effective control should be exercised. In respect to medicinal poisons, which are to the greater extent in the hands of those registered under the Act, the statistics show that retail chemists have so carried out their duties that fatalities from them have been effectively controlled, and the comparatively small number of deaths from the most violent poisons must be due to the control which the Act affords. The occasional but rare instances of laxity which we are called upon to report serve to stimulate the whole trade to further precautions, consistent with the duty which lies upon every registered chemist to supply legitimate demand, for it is no

part of the provisions of the law to stop the legitimate use and therefore the legal sale of scheduled articles.

	Negligence and Accidents		Suicides	
	Males	Females	Males	Females
Acetic acid	—	1	—	—
Aconite	1	—	—	2
Alcohol	4	—	1	—
Ammonia	6	7	6	10
Ammonia and turpentine ...	—	—	—	1
Ammonium sulphocyanide ...	—	—	—	1
Anæsthetics—				
A.C.E. mixture	1	1	—	—
Chloroform	57	24	—	—
Chloroform and ether ...	1	2	—	—
Ether	6	2	—	—
Ethyl chloride	2	3	—	—
Nitrous oxide	1	—	—	—
Kind not stated	23	32	—	—
Antimony	1	—	1	—
Arsenic	1	2	4	—
Arsenical beer	1	—	—	—
Atropine	1	—	—	—
Belladonna	6	1	3	3
Belladonna and aconite ...	—	—	—	1
Camphor	2	—	—	—
Camphorated oil	2	—	—	—
Carbolic acid	16	15	77	80
Caustic potash	1	—	—	—
Caustic soda	2	1	1	—
Chloral	8	—	1	—
Chlorodyne	2	—	2	21
Chloroform (not for operation)	3	3	1	2
Creolin	—	—	1	—
Creosote	—	1	1	—
Cresolin	—	—	—	1
Ether	—	3	—	—
Fungi	2	2	—	—
Fusel oil	—	—	—	1
Hemlock	—	1	—	—
Hydrochloric acid	7	4	50	23
Hydrofluoric acid	1	—	—	—
Iodine	1	—	1	—
Lead	3	6	1	—
Liniment	4	1	1	1
Liquozone	—	2	—	—
Mercury ammoniated	—	—	—	1
Mercury chloride	1	—	—	4
Mercury nitrate	—	1	—	—
Mercury sulphate	—	—	1	—
Methylated spirits	—	1	—	—
Mushrooms	—	1	—	—
Naphtha	—	—	1	—
Narcotic (kind not stated) ...	3	—	2	—
Nicotine	2	—	3	—
Nitric acid	—	—	2	2
Opium, laudanum, morphine	42	20	59	28
"Overdose of medicine" ...	1	1	—	—
Oxalic acid	3	8	58	49
Paraffin	—	1	—	—
Phosphorus	5	10	3	7
Poisonous berries	—	1	—	—
Potassium bichromate	1	—	—	3
Potassium binoxalate	—	—	—	2
Potassium chlorate	1	1	—	—
Potassium cyanide	3	3	40	5
Prussic acid and oil of almonds	1	1	51	1
Strychnine, nux vomica ...	—	2	13	2
Sulphonal	4	2	—	—
Sulphuric acid	—	—	2	1
Turpentine	—	—	—	1
Vapo-cresolene	—	1	—	—
Vermin-killer	1	—	2	2
Kind not stated	15	10	52	20

German Opium.

In the year 1795 one John Ball received from the Society of Arts the sum of fifty guineas for a description of his method of preparing opium from poppies grown in England. Mr. Ball resided at Williton, and in his "method" he told

how the seeds of the garden poppy (he got his poppy-heads from a London druggist) should be sown in February or March, the seedlings weeded, and the beds kept free from weeds and watered, until "the leaves die away and drop off, the pods being in a green state." That was the time to extract the opium, which Mr. Ball did by

making four or five small longitudinal incisions with a sharp-pointed knife, about 1 in. long, on one side only of the head or pod, just through the scarf-skin, taking care not to cut to the seeds. . . . The next day, if the weather should be fine, and a good deal of sunshine, the Opium will be found a greyish substance, and some almost turning black; it is then scraped off the pods . . . into pans or pots; and in a day or two it will be of proper consistence to make into a mass, and to be potted.

Mr. Ball further told that the other sides of the poppies were to be treated likewise. By a calculation which he made, and taking 1 grain of opium as the yield from one poppy, he considered that 50 lb. would be collected from one statute acre of land. The price of opium then was 22s. per lb. Mr. Ball collected 4 oz. from a bed "five hundred and seventy-six feet square." Mr. Ball's opium was tried by J. Latham, Bedford Row; George Pearson, Leicester Square; and George Wilson, Bedford Street; and all considered it equal to extract of imported opium. This effort of Ball's was recalled to us when glancing through a long but interesting account of work on the cultivation of the poppy and harvesting of opium at the Berlin University Pharmaceutical Institute at Dahlem by Professor H. Thoms ("Berichte der D.P.G.," 1907, 4). We quote from Ball's account in order to show that there is no novelty in making opium at home, but it has never been a paying business, climatic conditions and expense of labour thoroughly ensuring Persian and Turkish superiority. The same applies to Germany, where several distinguished pharmacists at different times last century made experiments which resulted in a few pounds of opium being obtained with an opium-content varying between 2 and 20 per cent. Professor Thoms's experiments are interesting, as they are illustrated with a series of photographs of the gardens at Dahlem (which are just behind the Institute), drawings of the capsules and incisions, and full details of the kinds of seeds grown, size of the capsules, yield of opium, time, temperature, and many other particulars being noted. We cannot possibly give these details, but we mention their existence so that those who want them may know where to look for them. The results of two seasons (1905-06) are given. Smyrna poppy-seeds ("noires" and "Bigarrés"), Persian and German (white and blue seeds), were used, and it was conclusively demonstrated that in 1906 the white German seeds gave the best results both in numbers of poppies and in opium-yield. The following figures for the same area of ground show this:—

	Poppies	Dry opium
1. Smyrna "noires" ...	4,771	16.3 grams
2. German blue ...	14,887	55.3 grams
3. German white ...	20,267	74.8 grams

The characters of the opiums are shown in the following analytical results (stated in percentages):

	Smyrna "noires."	German blue	German white
H ₂ O ...	4.0	3.7	4.5
Ash ...	3.2	3.3	3.2
CaO ...	0.36	0.37	0.34
P ₂ O ₅ ...	0.24	0.26	0.25
Petrol. ether extract	16.3	18.0	15.7
Morphine ...	13.9	11.1	10.8
Narcotine ...	4.0	1.3	1.9
Codeine ...	1.13	1.43	1.59

It has been observed that as the capsules ripen the morphine-content decreases. To Professor Thoms's paper is

appended a note by Mr. Allan Malin, who analysed capsules of the 1905 crop with the following results, in percentages:

	Morphine	Narcotine and Codeine
First harvest capsules unripe ...	0.05	0.0113
Second harvest capsules unripe ...	0.02	0.0116
Full-ripe capsules ...	0.018	0.028

These are curious results, and it would be interesting from the biological point of view to look more closely into the changes which occur in the transition of the alkaloids, especially as in the ripening-process narcotine and codeine grow in amount rapidly, but do not account for all the loss of morphine.

"What is a Mil?"

[Professor Crossley asked this question at Bloomsbury Square at this week's evening meeting. This attack on a faddy figment in the home of its origin caused great hilarity, which was accentuated when Mr. Edmund White, B.Sc., threw "a dash of bitter" on the querist (p. 267).]

This precious word, evolved in Bloomsbury,

Has no particular meaning—still,

It serves their own peculiar mission,

To muddle things they write it "mil."

"Electric wires resistive standard";

So scientists had thought until

This bright idea forth had wandered

And now a "mil" is not a "mil."

So Edmund spoke to Crossley crisply:

"If of good beer you want a fill

It matters not; a centimetre

May do as well as our pet 'mil.'"

This makes confusion worse confounded;

Mayhap 'tis synonym for "gill"!

To Bung let riddle be propounded,

"Is 'arf-a-pint the Bloomsbury 'mil'?"

Eau de Cologne for Australia.

The Australian Customs Act and regulations made under it require that the duty on such spirituous perfumes as eau de Cologne shall be paid not upon the actual contents of the bottle, but upon the reputed contents. If a bottle is described in an invoice or price-list as a quart bottle it pays the duty on a fourth of a gallon, although the actual contents may be no more than 25 oz. There is considerable dissatisfaction in the retail drug-trade of Australia regarding the matter, retailers feeling that a trifling alteration in the descriptions of the bottles would enable them to retail the perfume to the greater advantage of all concerned—the public and manufacturers as well as retailers. We trust manufacturers and wholesalers on this side will note the complaint, and in future state on invoices only the actual liquid contents of the bottles.

To What End?

[A South Country chemist sends us a handbill announcing a great sale of toilet-soap, in which it is stated that "the quality of the Soap is unsurpassed: it is not made for the purpose."]

The paragraph somewhat bewilders,

With its meaning we scarcely can cope,

We are vexed and dismayed;

For some purpose 'twas made—

Was it not for the purpose of Soap?

We embark on a quest speculative,

Ever buoyed by the pleasures of hope,

But no soap, to our mind,

Can be made so refined

As to be not for the purpose of Soap.

Chemists and Prescribing.

At an inquest at Bourne on February 9 regarding the death of a man of sixty-two from bronchitis and heart-disease, Mr. Edgar H. Judge, chemist and druggist, told the Coroner (Dr. A. C. Greenwood) that he had prescribed

medicines for the deceased, who asked something for urine-trouble. Thereupon the Coroner remarked that

if information as to this was given to the Society of Apothecaries, proceedings might be taken, and he would be liable to a fine of 20*l.* for prescribing. It was no part of the business of a chemist to prescribe, and if anything happened as a result of his treatment he would be in a very grave position.

These remarks appear in three reports which we have received. It is much to be regretted that they have been published without qualification, thereby reflecting unnecessarily upon a chemist who in prescribing did not exceed the rights accorded to every citizen of this realm. There is no liability under the Apothecaries Act for prescribing: the offence under that statute is *diagnosing disease and prescribing a remedy*. Such professional service on the part of chemists we do not attempt to justify or defend, but we do most strongly protest against unnecessary remarks in regard to lawful prescribing, especially when evidence shows (as in the present case) that it has not contributed in the slightest to deaths under inquiry.

Sage Oil.

By E. J. PARRY, B.Sc.

IT is a very difficult matter to find any sage oil which answers the usual standards laid down in the text-books. The following characters are given:

	Schimmel	Parry	Charabot
Sp. gr. ...	0.915–0.925	0.915–0.930	0.915–0.925
Opt. rotation ...	+10° to +25°	+10° to +25°	—
Esters (saponification value)	107	—	—

Although Schimmel quotes this high ester-number, no mention appears anywhere of the discovery of any ester in the oil, and it is impossible to say what esters the figure refers to. It is probable that the various sage oils distilled from plants grown in different countries differ very greatly. I have recently examined twelve samples of sage oils exported from Spain by reliable firms, but otherwise unauthenticated, and all described as sage oil, and I obtained the following figures:

Sp. Gr.	Opt. Rotation	Ester No.
0.907	+8°	22
0.911	+7°	20
0.918	+11° 30'	25
0.903	+8°	21
0.910	+7° 30'	18
0.921	+18°	37
0.927	+22°	39
0.918	+17° 30'	33
0.922	+16°	21
0.919	+25°	31
0.918	+14° 20'	30
0.917	+15° 30'	28

In no case was any ester-value so high as 100, or anything near it, found.

PHARMACEUTICAL PROVERBS.—To a recent issue of the "Spatula," Mr. W. T. O'Connor contributed a number of proverbs adapted to the drug-trade, of which the following are the smartest:

Never too late to advertise.
Little and often fills the cash register.
It's a short road that has no drug-store.
It's an ill-wind that blows druggists good.
Fine feathers do not make fine customers.
It's a wise child that knows what it's sent for.
A man may be known by the doctor he keeps.
Nothing is certain except stamps and the directory.
It's a wise doctor that knows his own prescription.
Some druggists are born great, some have greatness thrust upon them, others advertise.

MAKING UP HIS MIND.—Reporter: "To what do you attribute your great age?" Old Inhabitant: "I bain't sure yet, sir. There be several o' them patent-medicine companies as is bargainin' wi' me."—*Punch*.

Trade Notes.

MESSRS. BENNETT & SON, late of Bennett, Sons & Shears, Ltd., have started in the same line of business (chemical and pharmaceutical copper-smiths) at 42 Trinity Square, Tower Hill, London, E.C.

KINGZETT'S GOLF-BALLS.—In our note on Mr. Kingzett's new patent balls (*C. & D.*, February 9, p. 222) the name of the company which makes them was incorrectly given. It should be the Improved Golf Balls Co.

CREATING A DEMAND.—The Koko Maricopas Co., Ltd., 16 Bevis Marks, London, E.C., give in our advertisement pages a sample of the means they are taking to increase the demand for Koko. It is a reduced facsimile of a page in a daily paper.

THE INTERNATIONAL PLASMON, LTD., 66 Farringdon Street, London, E.C., announce in our advertisement pages some new varieties of Plasmon biscuits. The biscuits are made for the company by Messrs. Mackenzie & Mackenzie, of Edinburgh.

CLINICALS.—Messrs. Burge, Warren & Ridgley, Ltd., 91 and 92 Great Saffron Hill, London, E.C., publish in this issue of *THE CHEMIST AND DRUGGIST* a revised price-list of English-made clinical thermometers. The prices have been reduced for 1907.

POTASS. CHLORAS PURISS.—Messrs. May & Baker, Ltd., Battersea, S.W., have introduced a chemically pure potassium chlorate in scale form which does not in 10-per-cent. aqueous solution give a perceptible reaction with sulphuretted hydrogen. It appears that some chlorate on the market is contaminated with lead and other impurities, and the scaled salt is introduced to avoid the possibility of trouble on this score.

In Wright's Boy and Bubble painting-competition the following have taken the first three prizes:

First (25*l.*), Messrs. D. P. Roberts, Croydon.

Second (10*l.*), Messrs. Turner & Son, St. Ives.

Third (5*l.*), Mr. T. Evans, East Putney.

The names of fourteen others are given by Messrs. Wright, Layman & Umney in their advertisement this week. The firm are making a special feature just now of window-displays.

DRUGGISTS' SUNDRIES.—Messrs. Cuxson, Gerrard & Co., Ltd., Crown Buildings, Corporation Street, Birmingham, send us a copy of the new edition of their catalogue of druggists' sundries and chemists' specialities, which has just been published. The list is alphabetically arranged, and most of the articles listed are illustrated. It contains 139 pages, and at the end a good index is placed to facilitate reference to the contents. Messrs. Cuxson, Gerrard & Co. tell us they will send a copy to any chemist who writes for one.

NEW NORWEGIAN COD-LIVER OIL.—Messrs. Wright, Layman & Umney, Ltd., Southwark, S.E., received their first delivery of 1907 Norwegian cod-liver oil on Wednesday morning, and were good enough to send us a sample of it. We were curious to see what the new oil is like, as deliveries have been delayed this year, and in some quarters it is stated that this is because much of the oil rendered is unfit for medicinal purposes. Messrs. Wright, Layman & Umney's oil shows no indication of this, being remarkably bland and freer from fishy taste than is usually the case with the first consignments of oil. The following analytical factors, determined in the firm's laboratory, show that the oil accords with official requirements:

Sp. gr. ...	0.925
Refractive index (15° C.) ...	1.4805
Saponification number ...	185.3
Unsaponifiable ...	1.1 per cent.
Acidity calculated as oleic acid per 100 c.c. ...	0.42 gram
Iodine value (18 hours) ...	151.2

Reactions with sulphuric and nitric acids normal.

"WELLCOME" CHEMICALS.—Messrs. Burroughs Wellcome & Co. send us samples of their bismuth citrate and iron arsenate. The former is a crystalline, slightly buff-coloured powder, which dissolves quickly in water, forming a per-

fectly clear solution. It is bismuth and ammonium citrate, a convenient and valuable salt, but we suggest that it is advisable to market it under its full name. For the extemporaneous preparation of liquid compounds of bismuth it is most useful. The iron arsenate is presumably also a double salt, akin in composition to iron pyrophosphate. It occurs in green scales, and dissolves completely in water. It contains about 35 per cent. of ferric arsenate, and the dose is $\frac{1}{16}$ to $\frac{1}{4}$ grain. The firm have just published a United States edition of "Wellcome's Photographic Exposure Record and Diary, 1907," in which the monthly tables of light values are calculated for latitude 40° N.

COD-LIVER-OIL EMULSION.—For many years Messrs. Barron, Harveys & Co., Giltspur Street, London, E.C., have manufactured an emulsion of cod-liver oil with hypophosphites, in which the emulsifying-agent is an edible lichen. The preparation has grown steadily in favour with little pushing, and recently the firm have had to instal a high-pressure emulsifier in order to turn it out in larger quantities. One result of this is that the emulsion is now produced as "a perfect cream," this condition being impossible in non-gummy emulsions made by hand. It is a remarkably good and white preparation, its comparative limpidity being a striking characteristic, and we are assured that it neither thickens nor separates after long standing. The taste is delicious, and we learn from a neat handbill supplied to retailers that—

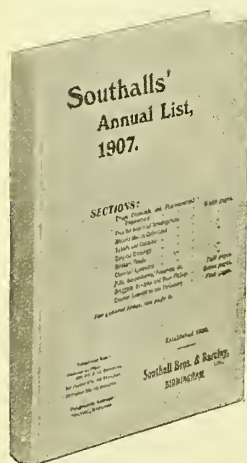
It owes its grateful flavour to maraschino, ratafia, and Ceylon cinnamon, which suggest a table delicacy rather than medicine, and is thus acceptable to the most fastidious and delicate.

Our readers can judge it for themselves, as Messrs. Barron, Harveys & Co. will send a sample to any retailer on application. The sample shows the style in which it is packed for retail, but the emulsion may also be obtained in bulk.

SOUTHALL'S ANNUAL LIST.—Messrs. Southall Bros. & Barclay, Ltd., Birmingham, have issued from their press this week a remarkably handsome and substantial price-list of all kinds of druggists', pharmaceutical, and surgical goods, bound in pale-blue cloth. The book measures about 10 in. by 7½ in., and is divided into four sections.

The first section on white paper extends to 132 pages, the first sixty-nine pages of which are devoted to chemicals, drugs, and their preparations (i.e., what is commonly given in monthly wholesale drug-lists); there are given in sequence a scale of analytical fees, and lists of materia-medica collections, tablets and capsules, surgical dressings, sanitary towels, and chemical and scientific apparatus, all being appropriately illustrated. The second section is a price-list of coated pills, horse-balls, suppositories and the like, printed on buff paper (48 pp.).

This is a most comprehensive list, as may be judged by the fact that 1,564 distinct kinds of pills are included. An illustrated price-list of druggists' and surgeons' sundries and implements, including shop-fittings, is printed on 112 pages of green paper, forming the third section, and is followed by an equal number of pink pages devoted to Southall's counter specialities. Practically every one of the articles listed here is illustrated with a wood engraving, and is accompanied by a statement of the composition of the article, "stamped" and "unstamped" prices being quoted where appropriate, as well as "in bond" and "export" terms. The remarkable variety in style and character shown in this section indicates of itself that Messrs. Southall Bros. & Barclay have mastered the requirements of export and home trade. The list as a whole forms a useful book of reference to retailers, and is produced in a manner that reflects credit upon the firm's printing department. The list is free from general trade advertisements, every page being devoted to the firm's own products, and there are many interesting pictures in it.



Festivities.

A Croydon Dance.

THE first annual B.C.C. (Boots, Cash Chemists, Croydon) Cinderella dance was held at the Café Royal, Croydon, on January 30. A large gathering of the staff and their friends took place, and, mainly owing to the untiring efforts of the M.C.s (Messrs. P. G. F. Brider and W. Bowen), a most enjoyable evening was spent.

Blackpool.

MR. J. RYMER YOUNG, President, P.S.G.B., was the principal guest at the dinner of the Blackpool and Fylde Chemists' Association, which was held at the Palatine Hotel, Blackpool, on Friday, February 8, Mr. H. M. Johnson (Hon. Secretary) presiding. It was a most enjoyable evening, toast, song, and sentiment passing the time most pleasantly, and at the close of the evening Mr. Rymer Young proposed a vote of thanks to Mr. Johnson for his conduct in the chair.

Sheffield Chemists' Ball.

THE annual ball promoted by the Sheffield Pharmaceutical and Chemical Society was held at the Royal Victoria Hotel on Thursday, February 7. The attendance was not quite so large as usual, there being about 150 present; but the reduced number in no way detracted from the event from a dancer's point of view—rather the reverse. We understand that the financial result will be satisfactory, and there is no doubt about the social success. Dancing was kept up until 2.45 A.M. The President (Mr. H. Antcliffe) presided at the supper, and disposed of the two toasts "The King" and "Success to the Sheffield Chemists' Ball and the Ladies" in record time. Mr. C. F. Carr (Nottingham) responded for the ladies, and expressed satisfaction at the treatment they had received. Mr. H. Antcliffe and Mr. E. C. Exell acted as M.C.s, supported by a hard-working band of stewards composed of Messrs. Percy Carr, R. D. Douglas, J. F. Eardley, G. T. W. Newsholme, J. G. Jackson, E. E. Richards, G. Squire, and H. G. Williams (Hon. Secretary). Among those present were Mr. H. Antcliffe, Mrs. and Misses Newsholme, Miss Williams, Mrs. G. Squire, Mrs. J. G. Jackson, Mr. G. J. R. Parkes (Hearon, Squire & Francis) and Miss Parkes, Mr. Mote (S. Maw, Son & Sons), Mr. Adamson (Parke, Davis & Co.), Mr. Hill (Ayrton & Saunders) and Mrs. Hill (Birmingham), Mr. J. B. Pater, Mr. John Evans, F.I.C., F.C.S., and Dr. J. Sorby.

Leicester Chemists Dining.

"SOMETHING quite above the usual average," was the unanimous verdict of experts in pharmaceutical dinners regarding the annual festive function of the Leicester and Leicestershire Chemists' Association. The dinner took place in the King's Hall of the Grand Hotel, Leicester, on February 12. The hotel itself is one of the finest of provincial hostelries, and the catering was first class. There were eighty-one present, fifteen more than the record, and all seemed to enjoy themselves thoroughly. The President of the Association (Mr. Walter Rowe) was supported on the right by the President of the Pharmaceutical Society (Mr. J. Rymer Young, J.P.), Dr. Sevestre, Dr. Montagu Williams, Dr. Southan, Mr. S. F. Burford, F.C.S., Mr. George E. Marfitt (Hon. Secretary), Mr. Avery; and on the left by Mr. W. S. Glyn-Jones, Mr. G. J. Blennerhasset Woolley, J.P., Dr. Killock Millard, D.Sc. (medical officer of health for the borough), Dr. Crosby, Dr. Bray, and Mr. Cornelius Bayley, of Uppingham. The Chairmen of the spur tables were Mr. Joseph Young, Mr. F. C. Goodess, and Mr. S. E. Cleaver. Among others present were Messrs. W. Thirlby, Hearnshaw, Palmer, Clear, Ward, MacReath, E. H. Butler, Hind, Squires, and several other Leicester chemists, besides Messrs. W. Howard Lloyd, Ernest Lloyd, and O. T. Elliott (T. Howard Lloyd & Co.), Lewis Ough (J. Richardson & Sons, Leicester, Ltd.), F. J. Brett, W. F. Charles and F. R. White (Loughborough), W. Woolley (Blackburn), W. S. Gill and Featherstone (W. J. Bush & Co., Ltd.), Ernest Jones (Armour & Co., Ltd.), F. W. Ashton (Idris & Co., Ltd.), Crofts and Cross (Parke Davis & Co.), Bennett and Matthews (Wyleys, Ltd.), MacBride (Burroughs Wellcome

& Co.), Inchley (Scott & Bowne), Hampton (John Morgan Richards & Sons, Ltd.), F. Hill (Death & Ellwood), and others.

The loyal toasts having been honoured, the Chairman announced apologies for absence from Mr. Richard Winfrey, M.P., from Mr. J. T. Walters, M.P., from Sir Edward Wood (Mayor of Leicester), and others. Mr. Rowe read Mr. Winfrey's letter, in which Mr. Winfrey explained that he was confined to bed and regretted that he would be unable to fulfil his engagement. He wrote:

I had a letter from Mr. Bremridge this morning, in which he tells me the Pharmaceutical Society wish me to again introduce the Bill early in the session. I am still hopeful that the Government will accede to the request for a Select Committee to inquire into the whole position, and if they do, I believe the pharmacists have such a strong case that a way will be found by legislation to at any rate mitigate the grosser injustices under which they now suffer.

"The Pharmaceutical Society" was proposed in a quaintly humorous speech by Mr. Joseph Young, who reminded the company that he had three sons in pharmacy, two of whom were Pereira medallists. In an eloquent, witty, and distinctly original reply, Mr. Rymer Young dealt with pharmaceutical topics in a manner that secured the sympathy and appreciation of his entire audience. Some curiosity was manifested beforehand as to how Mr. Rymer Young would acquit himself, he being practically unknown in Leicester, but there was no divergence of opinion as to his ability and eloquence after he had spoken. He began by alluding to the record in pharmaceutical capacity shown by Mr. Joseph Young and his sons, but pointed out that he was not quite sure that being Youngs they could help it. It was all in the breed, he said, amid much laughter. An anecdote regarding his futile purchase at a Crewe bookstall of a book of "Ready-made Speeches," which he anticipated might be useful to him during his presidential career, having put him on thoroughly good terms with his auditory, he went on to speak of serious pharmaceutical affairs. Regarding his election to the Presidency, he said that he had not yet reached that stage of cynical indifference which is impervious to either blame or praise. He liked praise, if it could be obtained on legitimate lines, and he hoped to be able to deserve it. He then paid a tribute to his "powerful and vigorous predecessor," Mr. Robinson, saying that he was in entire sympathy with the policy pursued by Mr. Robinson, and that that policy would be continued. With reference to the Pharmacy Bill, the aims of chemists had never yet been defined because they had not yet had a hearing in Parliament. There had been many criticisms of the Bill, and

ONE VERY ABLE MEMBER

of the Council had suggested that the Council should reconsider their position and remodel the Bill. But it seemed to at least twenty other members that the Council would not be justified in introducing a new Bill which had not had the approval of the majority of chemists in the country. The present Bill has been modelled and remodelled, and he believed it largely represents the wishes of the vast majority of the pharmaceutical community. On the other hand, the Government Bill was drafted by departmental drafters who know nothing of the real nature of the wants of chemists. But mainly it should be urged that the Bill projected by these Parliamentary drafters is a menace to the public. It destroys its theory of protection entirely by attempting to sweep away all the safeguards that make for the protection of the public. It is not clear that pharmacy requires it, or that agriculture needs it, and it would be an extremely hazardous thing for the community if chemists were superseded by licensed sellers of packed poison, be they seedsmen or be they ironmongers. The Pharmaceutical Council had, in his opinion, wisely shown that they were open to compromise, and they were entirely justified, he said, provided a *quid pro quo* were obtainable. But unless the *quid pro quo* be forthcoming, the Council would do all in their power to oppose the Government Bill. For it would be difficult as a matter of logic to argue that once unqualified persons are allowed to sell packed poisons in the form of weed-killers, they cannot also sell Winslow's soothing-syrup. If the two Bills come forward, it should be the aim of chemists to get their Parliamentary representative to agree to vote for both being sent to an impartial committee for consideration.

They were approaching the Home Secretary to that end, but any deputation to Mr. Gladstone must be so united and so representative of the desires of chemists in general that he cannot afford to ignore it. He emphasised the necessity of unity, for it had come to the knowledge of the Council that chemists in different towns had been interviewing members and asking for different things. That course is disastrous. The deputation idea to the Home Secretary is the course most favoured by members of Parliament, who appear to be rather chary of the balloting suggestion.

In proposing "The Medical Profession," Mr. G. J. B. Woolley was particularly happy. Among other evidences of the advance of the medical profession and their appreciation by chemists was, he said, the fact that medical prescriptions are more legible nowadays. There are fewer hieroglyphics, and the prescription which looks "as if an erratic fly from an inkpot had walked over a sheet of paper" is now very rare. Dr. Killock Millard and Dr. Sevestro replied, the latter fastening upon the "hieroglyphic" incident and retorting that chemists themselves had taken over the hieroglyphics. He was confronted daily with extraordinary formulæ which he was told were combinations of the benzene ring, and as he did not know anything about it, he accepted the statements in good faith.

"The Proprietary Articles Trade Association" was given in a pointed and pithy speech by Mr. G. E. Marfitt. In responding, Mr. Glyn-Jones said they had been accused of using trades-union methods. He was bound to say that whatever they might think about trades-unionism, the professions, including pharmacy, have a deal to thank trades-unionists for. The best friends that pharmacy has in the House of Commons are the trades-unionists, who recognise that the chemists and themselves are fighting for the same principles. The P.A.T.A. had done much to stop unfair competition, but it was absurd for chemists to urge recalcitrant manufacturers to put their proprietaries on the P.A.T.A. list, while at the same time they (the chemists) transmitted their request in an envelope bearing the name of an unprotected article, or made a fine window-show of some proprietary not on the protected list.

"The Leicester and Leicestershire Association" was proposed by Mr. Daniels, and was replied to by Mr. S. F. Burford, in a graceful speech. Mr. Burford read one of the rules of the Leicester Chemists' Association in the year 1845. It stated that:

Every member charging a lower price than that in the book would be liable to a fine of two shillings and sixpence, but there was no restriction on anyone wishing to charge higher prices.

Mr. W. Thirlby, a past-President of the Association, gave "The Visitors," to which Mr. Cornelius Bayley (President of the Peterborough Chemists' Association) replied. The concluding toast, "The Press," was neatly and wittily given by Mr. Hampton, and the representative of THE CHEMIST AND DRUGGIST responded.

During the evening an excellent musical programme was gone through by Mr. W. Langford and company, particular mention of the singing of Miss Nellie Wilby being necessary.

New Books.

These notes do not necessarily exclude subsequent reviews of the works. Any of these books printed in Great Britain can be supplied, at the published price, to readers of this journal on application (with remittance) to the Publisher of "The Chemist and Druggist," 42 Cannon Street, London, E.C.

Lodge, Sir Oliver. *Electrons; or, the Nature and Properties of Negative Electricity*. 8½×5½. Pp. 246. 6s. net. (Bell.)

Owen, E. *Cancer, its Treatment by Modern Methods*. Bradshaw Lecture 1906. 8vo. swd. 1s. net. (Baillière.)

Ramsay, A. Maitland. *Eye Injuries and their Treatment*. 10½×6½. Pp. 226. 18s. net. (MacLehose.)

Thompson, Silvanus P. *Manufacture of Light*. Lecture at the meeting of the British Association at York. Cr. 8vo. Pp. 74. 1s. net. (Macmillan.)

Weber, Sir H., and Parkes, F.—*Climatotherapy and Balneotherapy: Climates and Mineral-water Health Resorts (Spas) of Europe and North Africa*. 10×6. Pp. 834. 15s. net. (Smith & E.)

Pharmaceutical Society of Great Britain.

EVENING MEETING.

MR. J. F. HARRINGTON performed his first public duty after his appointment as Vice-President in presiding at the evening meeting held at 17 Bloomsbury Square, London, W.C., on February 12. The wet evening had probably an untoward effect on the attendance. Among those present were Mr. W. L. Howie, Mr. H. W. Gadd, Mr. E. T. Brewis, Mr. H. C. T. Gardner, Mr. F. Ransom, Mr. F. Goldby, Mr. J. W. Bowen, Mr. F. U. Stamp, Mr. W. J. U. Woolcock, and Mr. C. T. Allen.

MORPHINE-ESTIMATION.

The first paper by Messrs. E. H. Farr and R. Wright on "The Official Process for the Determination of Morphine in Opium and Tincture of Opium" proved to be a long but interesting account of work done by the authors in testing the accuracy of the official process, the question having been raised by Dowzard in 1903. Mr. WRIGHT, who read the paper, prefaced his account by stating that the lime-process is the best hitherto devised: it yields the morphine in a comparatively pure state, and is easily worked. The authors state that the general principles of the official method are sound and the process quite satisfactory in theory. It is unlikely that with a complex body like opium a better process will ever be devised for obtaining the morphine free from impurities. The method can only be approximately correct, but will be preferred as one which gives concordant results in a reasonable time. The results are equal to the best of the published processes, the only suggested improvement being the employment of hot amylalcohol for dissolving the morphine. The chief points of criticism were then taken *seriatim*. The first one is as to the loss of morphine. This is common to all processes, especially where the morphine is crystallised from alcohol and ether; there are similar losses in the U.S.P. process. Conroy first investigated this question and made the correction. The authors have confirmed this correction which averages 1 mgm. per c.c. When Conroy's process was adopted in the B.P., 1885, no notice was taken of the loss of morphine, but this was neutralised by the amount of impurity in the crude alkaloid being equal to that required to be added for correction. The verdict of the authors was that the B.P. correction is "a little below the truth." The next point was in regard to the amount of filtrate directed to be collected as representing a given quantity of opium, to correct for increased volume due to soluble extractive and lime. From experimental data the authors concluded that calcium hydroxide occupies a volume equal to half its weight and that the opium occupies a volume equal to two-thirds its weight, and that 103 c.c., or some volume between 102 c.c. and 103 c.c., more nearly represents 10 grams of opium than the B.P. quantity of 104 c.c. The loss of water on drying the morphine was the next point considered. Experiments were made as to the temperature required to dehydrate the morphine, the conclusion being that the official instructions to dry at above 100° C. are justifiable, as that temperature is needed to obtain the monohydrate. The authors next investigated the question of the amount of impurity in the crude morphine, and found the average to be 7.1 per cent. The official process for the assay of tincture of opium was then dealt with. The authors could not agree with Dowzard that a serious blunder has been made in ordering the volume to be made up to 85 c.c. The formula for the tincture is so drawn as to admit of the use of Indian opium, and the assay-process is primarily intended for the strong tincture before dilution. Experiments show that the volume should be 83.5 c.c. to 84 c.c. for Turkey opium and 85 c.c. for Indian opium. The determination of alkaloids in opium other than morphine has not received much attention unless in regard to the codeine. If the permission to use Indian opium is continued in the next Pharmacopœia, it seems desirable that some method of differentiating the alkaloids be included, because Indian opium contains a higher percentage of narcotine than Turkey opium, the latter being richer in morphine. The result of a considerable amount of work in comparing

the different assay-processes has convinced the authors that, granted the principles are sound, the results obtained by the various processes are practically identical. Based on the experimental work outlined, the authors made several recommendations. In the opium-assay they suggest that the quantities taken should be: opium 9 grams, calcium hydroxide 2 grams, and water 80 c.c., and that 51 c.c. of filtrate should be taken as representing 5 grams of opium. In the assay of the strong tincture a smaller quantity is also recommended to be taken—namely, 40 c.c.; this to be evaporated to 10 c.c., calcium hydroxide 1 gram added, diluted to 42 c.c., and 25 c.c. filtered off for the assay. When working with finished tincture take the same quantities, dilute to 41.5 c.c., and filter off 25 c.c. In the case of solid extract of opium the amount taken should be 2.5 grams, to this 1 gram calcium hydroxide is added, then dilute to 51 c.c., and filter off 40 c.c., the equivalent of 2 grams of solid extract.

DISCUSSION.

Professor H. G. GREENISH said it was difficult to discuss a paper such as this without consideration. It was satisfactory to learn that the official assay-process did not stand in need of any far-reaching alteration. In any aliquot-part process the results are bound to be only approximate, but the process is convenient and sufficiently accurate for practical purposes. He should be sorry to see the official method modified so as to be applicable to both Indian and Turkey opium. It is evident that the permission to use Indian opium has not been taken advantage of in this country, as he had even been unable to obtain class-room specimens. The restriction in this country to Turkey opium was desirable, with permission to use native opium in India. Having regard to the different proportions of the alkaloids, it does not seem desirable to allow the indiscriminate use of the two kinds in official preparations.

Mr. PETER MACEWAN characterised the paper as an excellent *résumé* of the criticisms of the official process. It is important that pharmacists, as distinguished from analytical chemists, should not be provided with a process giving that degree of refinement which is needed where the money yield of opium is being estimated. All that is necessary is such an approximation to the truth as will ensure a fair amount of uniformity. No one can question the comparative ease of working the B.P. assay-process. He (the speaker) was interested in what had been said in regard to Indian opium. He was inclined to the opinion that Indian and Asia Minor opiums might be regarded as two distinct drugs, owing to the widely different proportions of their alkaloidal constituents. The sample the authors worked upon seemed to have had a good morphine-percentage, but the morphine often falls down to 3 per cent. In India opium is valued for its efficacy in warding off malaria, narcotine being the alkaloid to which this property is due. Narcotine is, according to some therapeutists, allied to quinine in its action. The speaker noted that the authors spoke about "Pharmacopœial authorities," and said that Dr. MacAlister and his associates on the Pharmacopœia Committee are the Pharmacopœia authorities, and such persons as Messrs. Farr and Wright may be called pharmacopœial authorities.

Mr. T. TICKLE said it occurred to him that the sugar of milk used as an opium-diluent might be the cause of a variation in opium-assay. The lime would combine with some of the sugar, and on the subsequent addition of ammonium chloride a stronger ammonia would be obtained. This would give a larger loss of morphine, and the results would come out too low. There is another disadvantage in the use of sugar of milk in that morphine is more soluble in substances of that class, a double loss being thus introduced.

Mr. E. F. HARRISON confirmed Mr. Tickle's remarks, as he had had experience with a sample of opium that had been diluted with anhydrous glucose. A large error—up to 3 or 4 per cent.—could be got in the morphine-assay by extending the time of the precipitation of the morphine. The increase in the quantity of lime could be accurately followed by analyses of the ash. He did not know whether a reducing sugar is among the constituents of opium, but if so he could see in its presence a possible source of error. It is quite unnecessary to dry the opium more than to make it

uniform. This would advantageously shorten the process. He had found that practically monohydrate remains on drying at 110°C . What is wanted is a method that will give constant results, so as to ensure uniformity. He noticed that Messrs. Farr and Wright used hot water for dissolving extract of opium, which would be introducing a source of error in the volume.

Professor CROSSLEY said the combination of calcium and strontium with sugar is made use of in extracting sugar, so that the sugar of milk was very likely to introduce a source of error. He would like to know what the authors meant by a "mil"; he did not recognise it as a designation in the antiquated British system of weights and measures, and it is not part of the metric system. (Laughter.)

Mr. HAROLD DEANE pointed out an error in the calculation of the average of the impurities in the crude morphine. He made it 7.6, and not 7.1, as shown on the table.

Mr. WRIGHT, in reply, said that although hot water was to be employed in triturating the extract of opium, the liquid was afterwards cooled and made up to volume with cold water. He recommended the lower temperature, so as to get monohydrate. The morphine always contained traces of lime, but this does not interfere with the titration. Mr. Tickle's point as to the influence of the sugar is important. He had noticed that after standing for a long time a fair additional amount of crystalline matter is deposited, which he had little doubt is morphine. The text of the B.P. opium-assay has to be read more than once before one can ascertain whether it is intended to be applied to diluted opium. Nowhere is it said that the assay-process is to be applied to the finished opium. The monograph is not sufficiently explicit. Mr. MacEwan's remarks on Indian opium were valuable; the point had not occurred to him. The error mentioned by Mr. Deane he acknowledged, but the miscalculation does not affect the principle.

Mr. E. H. FARR said the "mil" has been accepted by the Board of Trade, so that chemists must bow to the inevitable. Standard measures have been issued. It is a convenient word for cubic centimetre.

Mr. E. WHITE further explained that "mil" is an abbreviation for millilitre, and is slightly different from a cubic centimetre. It is true that probably no difference would be detected in the quantity as far as beer is concerned, but there is a slight distinction. "Mil" replaces the expression "cubic centimetre."

A METHOD OF EXTRACTING MORPHINE.

The second paper was by Mr. THOMAS TICKLE on "The Estimation of Morphine—a Method of Extraction." This consists in using cresol as a solvent for shaking out morphine. He uses the mixture of phenol homologues found in commerce under the name of cresol. This is distilled once in the laboratory, and if impure should always be re-distilled before use. Amylic alcohol, now generally used, is, next to cresol, the best solvent of morphine, and in practice equal volumes of amylic alcohol and cresol are used. If the liquid contains glycerin and sugar it is better to use cresol 1 part, amylic alcohol 2 parts. The use of cresol is advantageous where salts are present. Sodium carbonate or bicarbonate can be used for liberating the alkaloid. As evaporation is inconvenient, the alkaloid is best recovered from cresol by shaking with aqueous acid; weak acetic acid is most convenient, as the excess is easily evaporated. On adding ether to the cresol solution, the whole of the alkaloids are yielded to acetic acid, this being due to a change in the constitution of the cresol, water being thrown out. He had made many experiments with a view to showing the accuracy of the methods.

Mr. E. F. HARRISON said the paper was important. Had the author applied the method to the assay of opium?

Mr. H. FINNEMORE said some two years ago he argued that a solvent for morphine—a phenoloid body—would probably be found among the phenols, but he did not follow up the matter. Had Mr. Tickle tried any of the aromatic hydroxy-alcohols?

Mr. R. WRIGHT said that if he had known such a simple process for obtaining pure morphine he would have been working it long ago. It seemed from the paper that it would be possible to devise a process that will supersede all the present official methods. The paper is a very suggestive one.

Mr. TICKLE, in reply, said he had applied the method to opium fairly extensively. He had not yet finished determining where all the other alkaloids go to; some of the narcotine is left behind, and that is true of one or two other of the weak bases of opium. The method can be used in conjunction with any known process of fixing morphine by potash. It works better with concentrated than with weak solution of morphine. He had tried one or two other alcohols, but they were not so successful. Eugenol, for instance, shows a marked falling-off in solvent powers, and he came to the conclusion that benzyl alcohol was not worth trying, as he got such good results with the phenol cresols.

Votes of thanks were accorded the authors of the papers.

EXHIBITS.

Mr. H. C. T. GARDNER showed a morphine-precipitating bottle, and among the plants which the curator exhibited were *Dianella cerulea*, N.O. *Liliaceae*, and *Combretum sundaicum*, Miq. The former is used as a rat-poison in the Straits Settlement; rice soaked in an infusion of it is greedily eaten by rats and mice. *Combretum sundaicum* has recently attracted attention under the name of "anti-opium plant."

Chemical Society.

A MEETING was held at Burlington House on Thursday, February 7, Professor Meldola (President) in the chair. Reference was made to the deaths of its two remaining honorary foreign Fellows in Russia, Professors Mendeléeff and Menshutkin, and a Mendeléeff Memorial Lecture was probably foreshadowed in the statement that a detailed account of the former philosopher's work might be laid before the Society on a future occasion.

THE RAPID ELECTROLYTIC DEPOSITION OF METALS

was the title of the first paper, which was contributed by Dr. H. J. Sand. He showed that many of the difficulties attending the quantitative deposition and separation of metals by electrolytic methods can be avoided if the electrolyte is efficiently agitated. He has devised for this purpose a pair of electrodes, consisting essentially of short cylinders of platinum gauze, separated from each other by a space of about 0.25 inch, so as to give a minimum liquid resistance, and the inner electrode can be rotated at a high speed. Using this arrangement a mixture containing any pair of the following seven metals can be quantitatively separated into their two metallic constituents, both being obtained in the form of coherent weighable deposits—viz., lead, cadmium, copper, magnesium, zinc, silver, and mercury. This paper aroused a good deal of interest, as electrical methods of separation are becoming increasingly popular among mineral chemists.

THE ALKALOIDS OF ERGOT

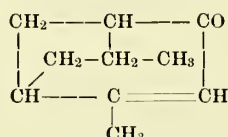
was the title of a further communication from the Wellcome Research Laboratories by Dr. G. Barger and Mr. F. H. Carr. The authors referred to the work of Tanret, Jakoby, Kobert, Dragendorff, and others, and recalled their work on ergotinine ($\text{C}_{35}\text{H}_{40}\text{O}_6\text{N}_2$) reported to the British Association last year (see *C. & D.*, 69, 364). When quite pure, ergotinine is physiologically almost, if not quite, inactive, but it is difficult to entirely remove from it the active alkaloid, which the authors isolated last year and named ergotoxine. This same difficulty in completely removing ergotoxine from chrysotoxin, sphacelinic, and sclerotinic acids, and other so-called active principles of the drug accounts for the activity attributed to them. In the preparation of ergotoxine, advantage is taken of the very slight solubility of its hydrobromide in water (about 1 in 6,000), and of the crystalline nature of its salts. It is an amorphous alkaloid, having the composition $\text{C}_{35}\text{H}_{41}\text{O}_6\text{N}_2$, which differs only from that of ergotinine by the elements of water. The authors have prepared many crystalline ergotoxine salts, which constitutes an important point of difference from ergotinine, from which so far no undoubtedly crystalline salts have been prepared. *Ergotoxine phosphate* crystallises in white flat prisms, m.p. 186° – 187°C .; it is soluble in about 100 parts of cold water, forming a colloidal solution, from which it is precipitated upon the addition of an electrolyte. The hydrochloride is an

unstable salt, crystallising in diamond-shaped plates melting at 205° C. The normal oxalate crystallises in well-defined prisms, m.p. 179° C. In addition to these salts a crystalline acid oxalate, sulphate, nitrate, hydrobromide, and tartrate have been prepared. The relation between the alkaloids ergotoxine and ergotinine is a matter of considerable interest, inasmuch as it has been found possible to pass from the former to the latter by boiling with methyl alcohol, and from the latter to the former by the gradual action of dilute acids. The first published statements on this subject were made by Kraft (see *C. & D.*, 69, 570) soon after the authors' preliminary account of their work to the British Association last year. The authors had, however, independently made the same observations, and they now regard it as established that ergotoxine [Kraft's hydrat-ergotinine.—Ed.] and ergotinine may be converted the one into the other by the addition or removal of the elements of water. According to experiments of H. H. Dale, ergotoxine produces in doses of a few milligrams not only contraction of the uterus and other characteristic reactions of ergot described by him ("J. Phys.," 1906, 34, 163), but also gangrene of the cock's comb and other ergot effects ascribed by Kobert and others to sphacelinic acid. Crystalline ergotinine, uncontaminated with ergotoxine, either does not give these effects at all or only to a slight extent.

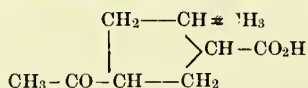
Two papers by Mr. Frank Tutin were communicated from the Wellcome Chemical Research Laboratories, one being the second part of the work on

THE CONSTITUTION OF UMBELLULONE,

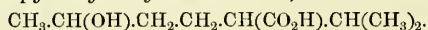
and dealing with the reduction of umbellulonic acid. Last year the author showed that umbellulone, isolated from essential oil of Californian laurel by Dr. Power and Mr. Lees, is most probably represented by the following formula :



It follows that umbellulonic acid, obtained by the oxidation of umbellulone, is represented by the formula :



The correctness of these conclusions could not at that time be confirmed by direct experimental evidence, but this has now been accomplished. Umbellulonic acid, $\text{C}_9\text{H}_{11}\text{O}_3$, has been reduced with sodium and alcohol, when it is found that the ring contained in it is opened by the addition of two atoms of hydrogen, and a *hydroxy-acid*, having the formula $\text{C}_9\text{H}_{13}\text{O}_3$, is produced. This hydroxy-acid is *l-α-isopropyl-δ-hydroxy-n-hexoic acid*,



It follows from this, and from evidence previously obtained, that umbellulonic acid is either stereoisomeric with the known acid, pinonic acid, or else it is correctly represented by the above formula. As the former alternative is not the case, umbellulonic acid, and consequently umbellulone, must be correctly represented by the formulæ previously assigned to them. Mr. Tutin's next paper dealt with the reduction of

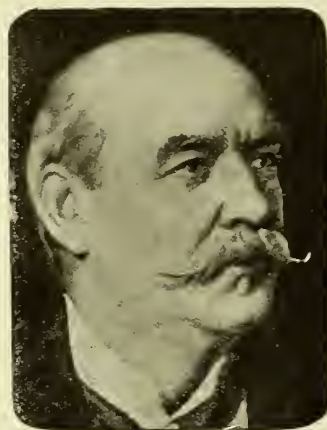
HYDROXYLAMINODIHYDROUMBELLULONEOXIME.

This oxime was prepared by Dr. Power and Mr. Lees in their investigation of the oil mentioned. When reduced with sodium and alcohol it gives a base (b.p. 136°-138° at 50 mm.) which is a liquid soluble in water. From the results obtained by the analysis of the dibenzoate, dihydrochloride, and dibenzoyl derivative of this base it is impossible to say with certainty whether it has the formula $\text{C}_{10}\text{H}_{20}\text{N}_2$ or $\text{C}_{10}\text{H}_{22}\text{N}_2$, although it is most probable that the latter is correct. The base may therefore be designated *aminotetrahydroumbellulamine*. It gives a crystalline dihydrochloride, dibenzoate, and dibenzoyl derivative, which were fractionally crystallised.

Winter Session.

Association Presidents.

THERE are few presidents who are more warmly esteemed by their fellow-members than Mr. James Russell, of Dundee, President of the Forfarshire Chemists' Association. He was born into pharmacy, his father, the late Mr. David Russell, having established the business which his son James became connected with forty years ago; but in those early days the son was more devoted to the palette than the pestle, and he has never lost his devotion to Art. Even now he edits and publishes a monthly of the "Punch" type, entitled the "Wizard of the North," and before Dundee had a permanent art-gallery and there were annual exhibitions Mr. Russell exhibited in a modest way, besides publishing a sort of "Academy Guy'd," which made everybody laugh. In local pharmacy Mr. Russell is one of the few remaining links between the old Dundee Chemists' Association and the new Forfarshire one. In the latter he has been an office-bearer since its inception, and it is very largely owing to his perfect ignorance of the existence of difference of opinion that the Association is a harmonious body. Our portrait is from one in oils painted by Mr. D. Combie Adamson.



MR. J. RUSSELL.

Folkestone Chemists' Association.

A MEETING was held at the Queen's Hotel, Folkestone, on Thursday, February 7, Mr. J. W. Stainer (President) in the chair. There were also present Messrs. Giles, Mallinson, Price, Taylor, Steel, and Curtis (Hon. Secretary). A very profitable time was spent in the discussion of items of pharmaceutical interest peculiar to the district.

Great Yarmouth Pharmaceutical Association.

THE February meeting was held at 156 King Street on Thursday, February 7, at 8 P.M., Mr. Harvey Palmer (President) in the chair. It was decided that the Association should be represented at the special meeting of the Federation in May.

Altrincham Chemists' Association.

A MEETING was held in the Association Rooms at the Axe and Cleaver Hotel, Altrincham, on Wednesday, February 6, Mr. J. W. Unsworth (President) in the chair. The evening was chiefly spent in discussing trade-matters, and making arrangements for the annual supper to be held on March 6.

Guildford Chemists' Association.

THE monthly meeting of this Association was held at the Angel Hotel, Guildford, on February 6. Two new members were elected. Mr. Gane Inge (Haslemere) was appointed to represent the Association at the meeting of divisional officers and delegates to be held in London on February 27. Mr. Simpson (Guildford) was appointed deputy-delegate, and will act if Mr. Inge is prevented from going to London. A discussion also took place as to the best method of insuring against claims under the Employers' Liability Act.

Stockport Chemists' Association.

A MEETING was held at the County Restaurant on Wednesday, February 6, Mr. J. F. Royse (President) in the chair.

Messrs. Nicholson, Riach, Watson, Wilson, and Orrell were also present. After correspondence had been dealt with, Mr. T. K. Westerman was elected a member. It was decided to have a hot supper and social evening on Wednesday, March 6, the registered chemists of Stockport and district to be invited. Mr. A. D. Watson read a paper on "Dispensing Problems," which provoked helpful and interesting discussion. Mr. Watson was heartily thanked. Mr. Wardle, M.P., has promised to receive a deputation from the Association *re* the Pharmacy Bill.

Newcastle-on-Tyne Chemists' Association.

A MEETING was held in the Hôtel Métropole, Newcastle-on-Tyne, on Wednesday, February 13, Mr. Gilderdale presiding. Consideration of the Federation matter was arranged for April 10. A new member was elected. Mr. Noble spoke at length upon the Pharmaceutical Society's compendium of medicines, and Mr. Wright introduced a discussion on the question of a Select Committee to consider pharmacy law, and the President, and Messrs. Buckley, Gibson, Wright, Pescod, Noble, Kerse, and Forster spoke. A resolution was ordered to be drawn up by the Secretary and President for consideration at the April meeting.

Bristol Pharmaceutical Association.

THE annual meeting was held at the Royal Hotel on Wednesday evening, February 6. A vote of thanks was accorded to the outgoing President (Mr. H. E. Boorne) for his services; and the following officers were unanimously elected for the present year: President, Mr. T. Grant; Vice-President, Mr. W. J. Nethercott; Hon. Sec., Mr. Trebilco; Hon. Assistant Sec., Mr. F. B. Kirby; Hon. Treasurer, Mr. H. E. Boorne. It was decided that the annual supper should take place rather later than usual. Various topics of interest to the craft were discussed, especially stock exchange among the members. This was introduced by Mr. H. E. Matthews, and was favourably received.

Keighley Chemists' Association.

A MEETING was held at the Devonshire Hotel on Thursday, February 9, Mr. A. N. Kershaw (President) in the chair. A lantern lecture on "Bacteria and their Products" was given by Mr. F. Pilkington Sergeant. He traced the course of the study of these micro-organisms from the time of Antony Van Leeuwenhoek, in the middle of the fifteenth century, up to the discovery of the influenza bacillus by Pfeiffer in 1892. He held that it ought to be within the range of a chemist's business nowadays to detect the presence of bacillus tuberculosis in sputum or milk. He dealt with the antitoxin and the opsonic treatments of bacterial diseases, and described the methods by which micro-organisms are isolated. A vote of thanks to Mr. Sergeant was moved by the President, and seconded by Dr. Scatterty, the Medical Officer of Health for Keighley, who said that he had learned a great deal from the lecture, and he had been surprised to find that chemists at their meetings tackled such serious subjects. If they were going to have any more lectures, and from lecturers of such capacity as Mr. Sergeant showed, he would be most glad to attend if they would invite him to do so. Mr. Dean, in supporting the resolution, expressed the hope that they would have further lectures of such quality, and that other members of the medical profession of Keighley would give them the advantage of their presence, because they, as chemists, wished to work in entire harmony with the doctors. The resolution was carried, and Mr. Sargent briefly responded.

Chemists' Assistants' Association.

For the third time this session a meeting of the C.A.A. has been addressed by a well-known surgeon who has struck the common note of sympathy between the physician and pharmacist. At 73 Newman Street, London, W., on February 7, Mr. J. Clark (President) in the chair, and about seventeen other members being present, Mr. W. Hunter Richards, M.B., F.R.C.S., gave a discourse on

THE SENSES.

Mr. Richards gave a clear and interesting outline of the office and action of the brain and its particular centres in controlling and registering the various special sense-im-

pressions—sight, hearing, smell, taste, tactile, heat or cold, and pain. Analysis of feeling and motor activities originate in the grey matter of the brain-hemispheres, and every nerve has its centre therein or in the spinal cord. Destruction of the nerve or its centre means paralysis of the muscle served. If the nerve be severed it can be reunited, but damage in the brain-centre is not repaired. Mr. Richards showed diagrammatically the situation of some of the more important centres. Those of self-control and attention are in the forehead, and the character of a man is thus largely indicated by the size of his forehead. A Canadian who had his forehead blown away became exceedingly passionate and quite unable to learn anything new, although previously he had been dispassionate and intellectual. Mr. Richards described the measurement of the reaction-time of individuals—*i.e.*, their personal equation. The person is told that he is going to be touched, and when he feels it he is to press a button, which will stop a recording drum. Then, after an interval, he is touched and co-incidentally the drum is electrically set in motion, and the time elapsing during its motion until it is stopped by the person examined is a measure of the time he has taken to realise the touching. By this means Mr. Richards is able to accurately arrange sets of individuals according to their mental quickness. After dwelling on the three categories of mental states—the intellectual, emotional, and volitional—Mr. Richards returned to the brain-centres, and explained that each is an organic register which stores up past impressions and thus affords the basis of memory. The power of re-exciting these impressions is the foundation of knowledge and thought. The action of these registers is almost entirely mechanical, and for association of ideas, creative thought, etc., recourse has to be had to the intellect. Mr. Richards concluded with a discussion of Galton's law of heredity, and then declared himself ready to continue imparting information on the subject on any lines which questions by the members might suggest. The result was a long and interesting discussion on debatable matters, such as intuition, telepathy, and re-incarnation.

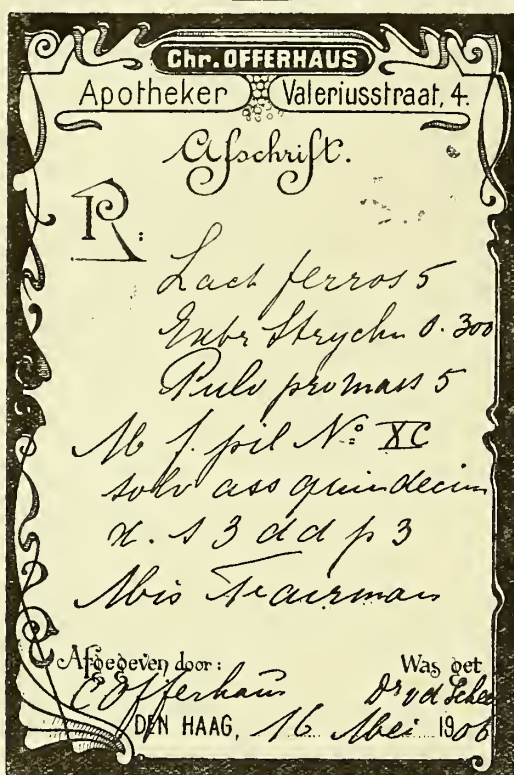
Replying to a vote of thanks, Mr. Richards said that it had long been a pet theory of his that there are many missing links between the medical man and the chemist, and he expects to see them in the near future on much more intimate terms and working much more in harmony.

Information Wanted.

Inquiries for the names and addresses of manufacturers, or other trade information, not traceable by reference to the advertisement-pages of "The Chemist and Druggist" and the "C. & D. Diary," or not filed in our private register, are inserted here free of charge. Postcard or other replies to any of the subjoined inquiries (addressed to the Editor "The Chemist and Druggist," 42 Cannon Street, London, E.C.) will be esteemed.

- 36/70. Who are the makers of Amartico tonic wine?
- 36/35. Makers of toy cameras and outfits from 6d. upwards.
- 36/23. Present address of makers of Terrol, substitute for cod-liver oil.
- 37/35. Where can a few fresh leaves of genuine *Grindelia robusta* be obtained?
- 37/68. Particulars in regard to "Red Barnet" paste for fattening horses, including source.
- 147/37. What is "compound Kargon" [? Kava Kava], used in bladder and kidney troubles?
- 33/62. Who are the manufacturers of "American Schwalla," a remedy for gout and rheumatism?
- 34/43. Where can London wart-pencils (J. J. Harvey) and Saunders's pharmaceutical pens be obtained?
- 38/26. Who are the makers of Featheredge rubber sponges and Pawnbeck folded finger-bandages?
- 35/61. Where can E.P. memo. tablets be obtained? The tablets are provided with hook for attaching to the chatelaine and with a pencil. The front is ornamented with cherubs.

Prescription Problem.



THE above was the prescription given in the *C. & D.*, January 12, and to which so far no correct replies have been received. The prescription is a copy made by Miss C. Offerhaus, apotheker, The Hague. It reads:

Lactatis ferrosi 5	Lactate of iron 5 grams
Extracti strychni 0.300	Extract of nux vomica ... 0.300 gram
Pulvis pro massa 5	Powder for mass 5 grams
Misce fiant pilulæ Numero xc.	Mix, make 90 pills.
Solvit asses quindecim.	He pays fifteen pence.
Da signa ter de die pilulas tres.	Label: "Three pills three times a day."

The trouble with all the competitors was the line "solv. ass. quindecim," and many and fearful were the transcriptions we received. As will be noticed, Miss Offerhaus's copy is a model, in that not only is there an indication of the weight of the finished pills, but also the price paid by the customer. Lactate of iron has been official in the *Nederlandsche Pharmacopee* for many years, while *extractum strychni* is the expressive official name for ext. nucis vomicæ. We are sorry not to be able to award any prizes this time; but the competitors have the consolation of knowing that the prescription baffled British and foreign pharmacists alike.

The results of the problem given in our issue of February 9 will, we hope, be given next week.

A PUBLISHING-DAY intervenes in our perusal of "The House of Rest," by Mrs. Fred Reynolds (Hurst & Blackett, 6s.). We have got so far in an entrancing tale as Leone Lorraine's removal to Arnside, as to which a son of the authoress has written these lines for the title-page:

*On a spacious tidal river,
Near the quaint old town of Kendal,
Are some thirty scattered houses:
This is daffodil-jamed Arnside.*

Leone loses her mother and gets a fortune practically on the day her mother is laid to rest. Years of poverty give place to affluence, which Leone uses to provide a House of Rest for those, like herself, of gentle-birth. Caerleon in Arnside, is, at our stage of the tale, where they live happy days. It is an entrancing tale.

Practical Notes and Formulæ.

A Gold-solvent.

THIOCARBONIC acid, $\text{CS}(\text{NH}_2)_2\text{SH}$, a reddish oily liquid, is a solvent for gold. If a leaf of gold is floated on the surface of the acid it is not long before it dissolves. If a small quantity of potassium permanganate, ferric chloride, or other oxidant is added, the leaf can be dissolved in less than a minute.

Liquid Soap.

THE "Répertoire de Pharmacie" gives the following method of making liquid soap:

Saponify 500 parts of coconut oil with 330 parts of potash-lye (1.384%) and 200 parts of alcohol: neutralise with oleic acid. The resulting soap can be kept as a jelly or dissolved in 2,000 parts of water, the latter solution containing 50 per cent. of soap. The soap can be rendered antiseptic by adding a little thymol, creosote, menthol, camphor, tincture of myrrh or paraform.

Solvents of Hard Paraffin.

HARD paraffin, with a melting-point of 53.5°C ., is dissolved at 20°C . in 1 c.c. of the following solvents in the proportions stated: Acetic ether, 0.0011; acetone, 0.0012; alcohol (96-per-cent.), 0.0019; ether, 0.834; petroleum ether, 2.0; ligronine, 2.44; chloroform, 2.46; benzine, 2.85; tetrachloride of carbon, 3.17. The solvent power of the last-named liquid should render it useful as a grease-solvent, with the advantage that, unlike benzine, it is unflammable.

Advertising Ideas.

By C. & D. Subscribers.

THE original of this is an octavo handbill, the printed matter being $7\frac{1}{2}$ in. by $5\frac{1}{2}$ in. It is a seasonable production, which we reprint with Mr. Foden's permission.



When there's ILLNESS

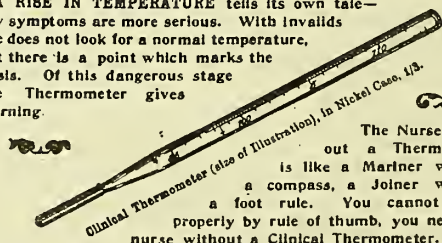
in the HOUSE,

You feel that you would give, or do, anything to make the patient well.

But you can't,—recovery is a slow process.

What you *can* do is this: You can secure the comforts that alleviate suffering, the aids to health which modern Science has invented for the benefit of the bed-ridden.

A RISE IN TEMPERATURE tells its own tale—few symptoms are more serious. With invalids one does not look for a normal temperature, but there is a point which marks the crisis. Of this dangerous stage the Thermometer gives warning.



The Nurse without a Thermometer is like a Mariner without a compass, a Joiner without a foot rule. You cannot nurse properly by rule of thumb, you need not nurse without a Clinical Thermometer.

COLD FEET MAKE THE NIGHT MISERABLE

for healthy people; they keep the delicate and invalid in torment. In sickness, cold does not confine itself to the extremities, and this is where the need for a Hot-Water Bottle arises. Our illustration shows you how it may be met.



THESE ARE ONLY TWO of the numberless *raqueillas* for the Sick-room. Perhaps you need neither now, but whatever you Hot-Water Bottle do need you may obtain at lowest prices, from

T. H. FODEN,
Pharmaceutical Chemist,
HIGH STREET, KING'S HEATH.
Telephone: 0889 Moseley.

Trade Report.

NOTICE TO BUYERS.—The prices given in this section are those obtained by importers or manufacturers for bulk quantities or original packages. To these prices various charges have to be added, whereby values are in many instances greatly augmented before wholesale dealers stock the goods. Qualities of drugs and oils vary greatly, and higher prices are commanded by selected qualities even in bulk quantities. It would be unreasonable for retail buyers to expect to get small quantities at anything like the prices here quoted.

42 Cannon Street, London, E.C., February 14.

A QUIETER tone has prevailed in drugs and chemicals this week, with little of interest to report, the few price changes being of minor importance. Quinine continues depressed, and is nominal. Bromides show no new feature, and as the negotiations have proved fruitless the war of prices continues indefinitely. Citric acid is again dearer. Norwegian cod-liver oil shows a rising tendency, as a result of the stormy weather interfering with the fishing. Crude camphor is offered at easier prices, but refined is not affected thereby. Senega is dearer. Other alterations include an advance in shellac and coconut oil; while castor oil, cantharides, euonymus, antimony, sugar of milk, and spearmint oil are all more or less cheaper. The changes of the week are as follows:

Higher	Firmer	Easier	Lower
Aloes (Cape)	Cod liver oil	Annatto	Antimony
Asafetida	Mace (W.I.)	Camphor	Arrowroot
Cardamoms	Senega	(crude)	Buchu
Cassia lignea		Cantharides	Chiretta
Chrysophanic acid		Castor oil	Peppermint oil
Citric acid		Euonymus	(H.G.H.)
Coconut oil			Spearmint oil
Sarsaparilla			Sugar of milk
(grey, Lima and native)			
Shellac			

Cablegrams.

SMYRNA, February 14:—The opium market is firmer, and large sales have been made for American account at from the equivalents of 9s. 10d. to 10s. 3d. per lb. Renewed cold weather in the interior is the cause of the advancing tendency.

NEW YORK, February 14:—Business is good. Opium is quiet and unchanged at last week's reduction to \$3.45 per lb. Copaiba is firm at 58c. per lb. for South American pure. Balsam Peru shows a strong market at \$1.35. Cascara sagrada remains easy at 9c. per lb. Senega has advanced to 48c., and ipecacuanha is steady at \$1.80 per lb. for Rio. Peppermint oil is dull at \$2.25 for American in tins.

Arrivals.

Among the drugs, chemicals, etc., which have arrived at the principal ports of the United Kingdom from February 7 to 12 inclusive, are the following: Acetanilide (@ Amsterdam), 10; acetic acid, (@ Rotterdam) 69 pks., (@ Fredrikstad) 20 cks. 111 cbs., (@ Antwerp) 92 cbs.; albumen (@ Havre), 3 cs.; aloes (@ Mossel Bay), 30; annatto-seed (@ Colombo), 8; antimony ore, (@ Singapore) 838 bgs., (@ Antofagasta) 1,165 bgs., (@ Mollendo) 185; argol (@ Cape Town), 42; arsenic (@ Barcelona), 100; benzoin (@ Singapore), 24 cs.; bleaching-powder (@ Treport), 47; borate of lime (@ Antofagasta) 6,696 bgs.; borax (@ Mollendo), 839; buchu (@ Cape Town), 77; calabar beans (@ W.C. Africa), 8; camphor, (@ Shanghai) 18 cks. 7 cs., (@ Hong Kong) 160 cs. *in tr.*; cardamom seed (@ Bombay), 30 cs.; cardamoms, 41; cinchona, (@ Ceylon) 81, (@ Calicut) 42; citric acid (@ Marseilles), 14; citronella oil (@ Galle), 15 dms.; cochineal (@ Las Palmas), 22; cod-liver oil (@ Bergen), 22; cream of tartar, (@ Bordeaux) 58, (@ Barcelona) 40; drugs, (@ Dunkirk) 50, (@ Marseilles) 16 bls.; ergot (@ Hamburg), 5; eucalyptus oil (@ Melbourne), 25; euphorbium (@ Mazagan), 25; fennel seed (@ Antwerp), 442; galls (@ Shanghai), 400; ginger (@ Jamaica), 5; gum, un-

enumerated (@ Suez), 120 bgs.; honey (@ Bremen), 25; lemon-grass oil (@ Cochin), 63; myrrh (@ Colombo), 18; nux vomica (@ Mangalore), 134; olibanum (@ Bombay), 64; oxalic acid (@ Hamburg), 31; pimento (@ Jamaica), 24; quicksilver (@ Seville), 5,000; quillaia (@ Talcahuano), 468; quinine (@ Rotterdam), 169 cs.; sandalwood (@ Tellicherry), 128; sandarac (@ Morocco), 142; sarsaparilla (@ Jamaica), 5; sticklac, (@ Singapore) 50 cs., (@ Rangoon) 100; sugar of lead, 30; tartar (@ Valencia), 138 bgs.; tartaric acid (@ Bari), 10; thorium salts (@ Flushing), 58; turmeric (@ Madras), 42; vanillin (@ Hamburg), 16; vermilion (@ Hong-Kong), 10; wax, bees' (@ Boston), 15 cs.; wax, carnauba, (@ Hamburg) 16, (@ Parnahyba) 21; wax, Japanese, (@ Kobe) 125 cs., (@ Hamburg) 59.

Heavy Chemicals.

On the whole the general conditions in the heavy-chemical market may be said to be very satisfactory. The all-round trade on both home and export account is well maintained as regards quantities, while the high and advancing costs of raw materials is sufficient in itself to keep values on the firm side. The difficulties at present and for some time past experienced in Continental river navigation has also had an appreciable effect upon orders received by home manufacturers.

SULPHATE OF AMMONIA must be described as being quietly steady. Forward business at present is very slight owing to the difference in views of sellers and buyers. The former for April-June delivery hold out for about 5s. per ton advance, which buyers are not much inclined to give. Present nominal figures: Beckton, 12l. 5s.; Beckton terms, 11l. 17s. 6d.; London, 12l.; Leith, 12l. 2s. 6d.; and Hull, 11l. 18s. 9d. to 12l.

ALKALI-PRODUCE.—Bleaching-powder steadily maintains a strong tone, and there is a good demand, especially against existing contracts. Softwood casks, free on rails, 4l. 12s. 6d. to 4l. 17s. 6d.; and export, 5l. 5s. to 5l. 15s. per ton, f.o.b. Liverpool, etc., according to market. Caustic soda also holds a strong position, and new business both on prompt and forward account is fairly plentiful: 76 to 77 per cent., 10s. 10s. to 10l. 12s. 6d.; 70 per cent., 9l. 15s. to 9l. 17s. 6d.; and 60 per cent., 8l. 15s. to 8l. 17s. 6d. per ton. Ammonia-alkali, 58 per cent., although perhaps a shade quieter, is, nevertheless, moving well at 4l. 10s. to 4l. 15s. per ton, free on rails in bags. Soda crystals are on the quiet side just at present: f.o.b. Tyne 62s. 6d. to 65s. per ton and f.o.b. Liverpool 67s. 6d. per ton. Salt-cake is in fairly good request, and varies from about 37s. 6d. to 40s. per ton in bulk free on rails. Bicarbonate of soda, 6l. 12s. 6d. to 6l. 17s. 6d. per ton, f.o.b. Liverpool, in 1-cwt. kegs and larger packages, 6l. 7s. 6d. to 6l. 12s. 6d. per ton. Chlorates of potash and soda are also rather quiet at 3½d. to 3¾d. per lb., according to quantity, etc. Prussiate of potash, 6½d. to 6¾d. per lb. and prussiate of soda 4½d. to 4¾d. per lb.; a good order, however, on forward account might perhaps get through at a trifle less.

HYPOSULPHITE OF SODA is in rather better supply, but prices continue very firm. Ordinary crystals in large casks, 6l. to 6l. 10s. per ton and in 1-cwt. kegs 7l. to 10l. per ton, according to quality and quantity. Silicates of soda moving well at unchanged rates: 140° Tw., 4l. 2s. 6d. to 4l. 12s. 6d.; 100° Tw., 3l. 12s. 6d. to 4l. 2s. 6d.; and 75° Tw., 3l. 5s. to 3l. 15s. per ton, according to quantity, quality, and destination.

American Drug-market.

New York, January 29.

Business continues good and the market is active, but without any marked advances. The demand for quinine is unusually heavy, even at the advanced prices.

ALOE.—True Barbados is exceedingly scarce, and 40c. has been paid for small lots. "Gourds" are obtainable at 14c. to 15c. Curaçao is steady at 7c. to 8c.

CAMPHOR is firmly held at \$1.20 in bulk for American refined.

CASCARA SAGRADA is quiet, with little inquiry. The Pacific market offers at 7½c., f.o.b. San Francisco, and local quotations are more or less nominal at 9½c. to 11c. per lb.

COPAIBA.—Pure balsam is scarce and firmer, with 57½c. an inside figure for spot goods. Pará is in light supply, and firm at 75c.

COCA-LEAVES.—Truxillo are easier, and offering down to 12c. GUARANÁ supplies are in few hands, and firmly held at \$2.00.

IPECAC.—The release of the shipments held up by the Customs has broken the stringency, and the market is easy. Rio is obtainable at \$1.75 and Cartagena at \$1.70.

JALAP is in rather better supply, and good quality root can be had at 18c. Some holders ask up to 30c. for high-test root.

JAPAN WAX is firmer, with 13c. quoted for spot goods.

MENTHOL is firmer, with \$2.60 an inside quotation. The tendency is upward.

PEPPERMINT OIL is in better demand, but quotations are still easy. Bulk oil is offered at \$2.25.

OPUM continues firm, with \$3.55 the lowest quotation for cases.

QUININE is in very heavy demand, and makers' quotations of 22c. are well maintained. Second-hands offer Java at 21c. and German at 21½c.

SENEGAL.—Some lots are available at 40c., but demand is small.

ACID, CHRYSOPHANIC, is dearer, up to 7s. having been paid, but now 8s. is asked from second hands. Makers do not appear to be offering.

ACID, CITRIC, is again dearer, at 1s. 9d. for English and 1s. 8d. for foreign.

ALBUMEN.—Market is unaltered, although for March-April shipment higher prices are asked for the new season's goods.

ALMONDS.—The opening prices in Messina are high and sellers are cautious. Sweet P. and G. for prompt shipment are quoted 89s. and October shipment 75s. 9d. per cwt. of 50½ kilos. f.o.b. The export demand has not been active recently, and prices receded slightly, although stocks are small, the chief interest centring on the future crop.

AMERICAN DRUGS.—The following are a few current quotations of American barks, roots, etc., on c.i.f. terms: Bayberry-bark, 37s. 6d. per cwt.; simaruba, 8d. per lb.; wild cherry, 3d. to 5d.; witch-hazel (hamamelis), 2d. to 2½d.; grindelia robusta, 5d. per lb.; lobelia-herb, pressed, 7d. per lb. (spot); loose ditto, 5d.; damiana-leaves, 5d.; deer-tongue, 5½d. per lb.; blue flag-root, 1s. 2d. per lb.; burdock-root, 4½d. per lb.; elecampane, 32s. 6d.; gelsemium, 42s. 6d.; culvers, 1s. 5d.; podophyllum, 28s. 6d.; blood-root, 4½d. to 5d.; serpentary-root, 1s. 9d. per lb.

ANTIMONY.—Japanese crude is lower at 67l. 10s. per ton spot—a reduction of 50s. on our previous quotation. Regulis is quoted from 106l. to 108l.

ARROWROOT.—At auction 769 barrels St. Vincent were offered, of which 300 sold at 2½d. per lb. for fair manufacturing, being cheaper.

BALSAM, CANADA, is quoted at 1s. 8d. in casks and 1s. 9d. in tins on the spot.

BALSAM, PERU, remains very firm at 5s. 9d. per lb., c.i.f.

BELLADONNA-ROOT is offering on the spot at 55s. for good quality, which appears to be more plentiful. Leaves are quoted 40s., c.i.f. terms.

BROMIDES.—The negotiations between the American and German representatives of the bromide-makers have not led to any definite conclusions, so that matters remain as they were so far as prices are concerned. This is said to be the first occasion on which the various representatives have met, and although their efforts have not been successful on this occasion, it must not altogether be assumed there is no likelihood of any understanding later. Half-ton lots of potassium bromide could still be had at 8½d. per lb. on the spot.

CAMPHOR.—Japanese slabs are quoted 4s. 7½d., tablets (½-oz.) at 4s. 11d. per lb., c.i.f., and German bells at 4s. 8d. to 4s. 8½d., c.i.f. Chinese crude for February-March shipment is offered at 360s., c.i.f.

CAMPHOR (SYNTHETIC) for manufacturing-purposes is offered at 4s. 3d. per lb., c.i.f. terms.

CANTHARIDES.—Prices from Hamburg come easier at 3s. 3d. per lb., c.i.f., for Russian.

CASSIA LIGNEA dearer at auction, five cases fair selected realising 55s. per cwt.

CHAMOMILES.—The demand continues at about 120s. per cwt. in small lots.

CINCHONA.—The auction to be held at Amsterdam on February 21 consists of 7,742 packages, weighing 715,804 kilos, and containing 39,062 kilos. quinine sulphate. The manufacturing bark contains an average of 5.90 per cent. q.s.; 61 bales of Ceylon bark weighing 5,350 kilos, and containing 103 kilos. q.s. will also be offered. Of the above 7,742 packages, the pharmaceutical bark weighs 96,863 kilos., and the manufacturing bark 618,941 kilos., containing respectively 2,801 kilos. and 36,261 kilos. of quinine sulphate.

CLOVES.—At auction four cases dark unpicked Penang were bought in at 8½d. per lb. Privately a large business has been done in new crop for delivery and on c.i.f. terms, transactions on Wednesday including June-August at from 7 9-16d. to 7 7½d., closing at 7 19-32d. value. For arrival

sales have also been made for January-March shipment at 7½d., and new crop, September-October steamer, at 6½d.

COCA-LEAVES.—At Amsterdam on February 21, 37 packages Java coca-leaves will be offered, weighing 2,459 kilos., and 20 packages South American, weighing 1,190 kilos.

COLCHICUM-SEED is quoted 72s. 6d. per cwt., c.i.f. terms.

EUONYMUS-BARK is rather cheaper at 2s. per lb., c.i.f.

GINGER.—Cochin and Calicut sold slowly at steady rates; 262 bags offered and 59 sold, including small wormy-washed Cochin at 30s., and bold and medium-brown washed Calicut at 38s. 6d.; 20 barrels and 13 bags Jamaica were offered and bought in, including good bright medium and small at 86s.

MACE.—West India dearer in auction. Twenty-five packages offered and sold, palish to pale at 1s. 6d. to 1s. 7d., fair red at 1s. 4d. to 1s. 5d., and broken at 1s. 1d. per lb.

OIL, CAMPHOR.—White essential is offered at 90s. per cwt., c.i.f.

OIL, CITRONELLA.—Ceylon is quoted 1s. 10½d. to 1s. 11d. per lb., spot.

OIL, COCONUT.—Both Ceylon and Cochin have advanced 2s. and 1s. per cwt. respectively. Ceylon is now quoted 43s., and Cochin 45s. per cwt., spot.

OIL, COD-LIVER.—Our Bergen correspondent writes on February 11 that during the past week the weather was stormy throughout, and the catch of cod was extremely small. A catch of 1.6 million cod is reported, yielding 1,375 barrels of oil, against 4.3 million cod, yielding 3,900 barrels of oil at the same date of 1906. To-day the weather is somewhat calmer. The prospects are considered to be fair as soon as a regular catch takes place. On the oil-market a slightly firmer tendency has set in, and finest new non-congealing Lofoten cod-liver oil readily obtains 67s. per barrel f.o.b. Bergen. Old oil of good quality may be bought at 63s. per barrel f.o.b. The exports from Bergen up to date amount to 914 barrels, against 1,289 barrels at the same date of last year. In London one agent offers new season's non-freezing Norwegian at 65s. per barrel f.o.b. Bergen for March-April shipment, but for finest brands of Lofoten a small business has been done for early shipment at a higher price than the above.

OIL, OLIVE.—An advice from Messina dated February 1 states that the outturn of the crop is so poor that not even an attempt is made to gather the few olives left on the trees. What little oil is produced is of dark colour and inferior quality. The entire demand will therefore be supplied from last year's stocks; but whether they are sufficient to last until November is doubtful, especially should Spain buy in Italy, as she is beginning to do.

OIL, STAR ANISEED, is unaltered at 5s. 5d. on the spot, and 5s. c.i.f. terms for arrival.

OIL, WINTERGREEN.—For true American oil, in original cases 6s. 6d. to 6s. 9d. per lb. is quoted by a leading distiller, the market being in upward tendency. In New York the equivalent of 8s. is quoted.

OIL, WOOD.—Small sales of Hankow have been made at 32s. per cwt.

OPIMUM.—Our Smyrna correspondent writes on February 1 that the sales amount to 54 cases, comprising 50 cases choice Karahissar t.q. at the equivalent of 10s. 1d., and 4 cases Yerli t.q. at 11s. 1d. per lb., c.i.f. European ports, these prices being about unchanged. The arrivals to date amount to 3,091 cases, against 1,432 at same period last year.

PEPPER.—No Singapore was offered at auction. Privately fair quality is offered at 5d. on the spot; 3 bags Ceylon were offered and sold at 5½d. for good fair. The market for arrival continues firm, with sales of 25 tons Singapore April-June shipment at 4½d., c. f. and i. At auction White Singapore was not represented; privately fair quality has been sold at 6½d. per lb. on the spot; 7 bags Ceylon fair to good sold at 6d. to 7½d.; 62 bags lined Penang were taken out at 6d. per lb. Privately the business includes 10 tons Singapore February-March at 6½d., landed terms.

PIMENTO.—Steady in auction, good being bought in at 2½d. and fair at 2½d. per lb.

QUININE.—With an absence of business speculatively, prices in second-hands are nominal, the nearest value for German sulphate in bulk being 9½d. per oz.

The fourteenth public sale of the Amsterdam quinine-works will be held at Amsterdam on February 27, when eighteen lots, amounting to 1,417,500 kilos. (50,000 oz.) quinine sulphate Ph. G. Ed. II., will be offered; also 400 kilos. quinine sulphate, according to various Pharmacopœias.

QUICKSILVER is steady at 7*l.* from first hands and 6*l.* 16*s.* from seconds.

SENEGA has advanced 2*d.* per lb. to 2*s.* 2*d.* net on the spot.

SHELLAC.—The spot market is firmer, with fair sales of TN orange on a basis of 215*s.* to 216*s.* per cwt. For delivery TN has been sold at 213*s.* to 214*s.* for March, and 211*s.* for May, and for February-April 208*s.* c.i.f. is quoted for TN.

TURMERIC.—Bengal is offered at 21*s.* on the spot, and fair split Cochin bulbs at 11*s.* 6*d.*, at which small sales have been made. In auction 8 bags China sold at 15*s.* per cwt.; Cochin split bulbs were limited at 11*s.*, Madras bulbs at 20*s.*, and dull to fair finger 25*s.* to 26*s.*

London Drug-auctions.

At the auctions of first and second hand drugs, a good proportion of the lots found buyers, features being as follows: Cape aloes sold at an advance of 1*s.* 6*d.*; but fine Curaçao in large gourds were held above buyers' ideas of values. Newly imported asafetida sold well at irregular but higher prices. Buchu is tending easier owing to arrivals. Sumatra benzoin remains easy. Cardamoms, being in restricted supply, realised 1*d.* to 2*d.* dearer rates. Ceylon coca-leaves and cascara sagrada proved steady. Dragon's blood quiet. Gum arabic is tending dearer owing to scarcity of most descriptions. Honey was mainly without interest. Ipecacuanha sold at steady prices for East Indian, Rio being of no interest to-day, and practically off the market in first-hands. Lemongrass oil sold at lower figures, without reserve. Steady prices were paid for lime, eucalyptus and cinnamon-leaf oils. Rhubarb is firm. For grey, native, and Lima sarsaparilla extraordinarily high prices were paid. Tinned senna was "full up." Sugar of milk was rather cheaper. Beeswax was generally steady. The list of goods given below states the number of packages offered and purchased:

Offered	Sold	Offered	Sold
Aloes—			
Cape	40 ... 20	Honey—	
Curaçao (gourds) 155 ... 0		Calcutta.....	125 ... 0
East Indian	10 ... 10	Honolulu	155 ... 0
Socotrine	17 ... 5	Jamaica	204 ... 36
Ambergris (tins) ...	1 ... 0	St. Lucia	55 ... 0
Ammoniacum	397 ... 0	Insect-powder. ...	16 ... 0
Aniseed (Span.) ...	20 ... 0	Ipecacuanha—	
Annatto seed	41 ... 6	Cartagena.....	13 ... 0
Areca	16 ... 0	East Indian	31 ... 29
Asafetida	477 ... 335	Rio (Matto Grosso) 3 ... 1	
Bael fruit	5 ... 5	Jalap	18 ... 0
Balsam—		Kamala	1 ... 0
Copaiba	1 ... 1	Kino	8 ... 0
Benzoin—		Kola	4 ... 0
Palembang	126 ... 0	Lime-juice (raw)...	5 ... 3
Siam	4 ... 1	Mangrove bark ...	33 ... 0
Sumatra	182 ... 23	Mastic	1 ... 0
Buchu	64 ... 6	Musk (Cabardine) 2 ... 0	
Calumba	100 ... 0	Myrrh	39 ... 5
Camphor (crude)...	58 ... 0	Nux vomica	78 ... 78
Jap. tabs	10 ... 0	Oil—	
Canella alba	8 ... 0	Backhousia cit... 4 ... 0	
Cannabis indica ...	15 ... 1	cinnamon	2 ... 2
Cardamoms	131 ... 108	clove	2 ... 0
Cascara sagrada ...	175 ... 144	eucalyptus.....	9 ... 1
Casein	10 ... 0	lemongrass (cs.) 35 ... 21	
Chiretta	68 ... 20	lime	15 ... 15
Cinchona	22 ... 0	orange	3 ... 0
Civet	2 ... 0	peppermint	18 ... 10
Coca-leaves	38 ... 30	Opium	2 ... 0
Cochineal	4 ... 1	Orange-peel	42 ... 0
Colocynth and pulp	15 ... 0	Orchella weed	22 ... 0
Cubeb	59 ... 39	Orris	41 ... 0
Cumin-seed	95 ... 0	Papaw-juice.....	4 ... 0
Cus cus	10 ... 0	Patchouli-leaves... 33 ... *33	
Cuttle-bone	114 ... 0	Rhapontica	12 ... 0
Dill-seed	100 ... 0	Rhubarb (China)... 64 ... 15	
Dragon's-blood ...	39 ... 1	Sarsaparilla—	
Egg-pulp	4 ... 0	grey Jamaica ... 7 ... 7	
Ergot	32 ... 0	Lima	9 ... 9
Galls (Pers.).....	102 ... 98	Mexican	8 ... 0
Gamboge	11 ... 0	native	11 ... 7
Guaiacum	2 ... 0	Scablae	25 ... 0
Gum arabic	110 ... 8	Scammony-root ... 114 ... 14	
Henbaue leaves ...	2 ... 0	Seedlac	1 ... 1

* Sold privately.

Offered	Sold	Offered	Sold
Senna and pods—			
Alex.	51 ... 2	Wax, Australian... 1 ... 0	
Timevelly.....	239 ... 200	East Indian	101 ... 0
Sticklac	27 ... 0	Egyptian	49 ... 0
Sugar of milk	17 ... 5	Jamaica	12 ... 1
Tonka beans.....	12 ... 1	Madagascar	197 ... 0
Turmeric	176 ... 8	Mogador	5 ... 0
Wax (bees')—		Spanish	10 ... 0
African	3 ... *3	Zanzibar	31 ... 5
		Wax (veg.)	20 ... 0

ALOES.—Half the quantity of Cape offered sold at an advance of about 1*s.* 6*d.* per cwt. Fine bright hard firsts realised 34*s.*, good ditto 33*s.* 6*d.*, and dull to dullish seconds 32*s.* to 33*s.* A parcel of ten casks of East Indian and Zanzibar mixed, "ex rail," and of old import, sold at 55*s.* for fair liver of little flavour, and from 40*s.* to 41*s.* for dull. A lot of 154 gourds of extra large size, containing mostly good liver to bright capey, was offered. For the finest lots bids of 80*s.* were refused, the buying-in price being from 90*s.* to 95*s.* Sweepings and pieces sold at from 21*s.* to 30*s.* Five kegs good hard hepatic Socotrine in kegs sold at 90*s.*

ANNATTO.—Six bags of ordinary dull dry Ceylon sold without reserve at 1*l.* 4*d.* per lb.

ARECA.—Sixteen bags Ceylon were bought in at 28*s.*

ASAFETIDA.—A parcel of 355 packages just arrived from the Persian Gulf met with good competition, principally for export account, at slightly irregular but dearer prices, the following rates being paid: Good free, partly blocky pale almonds, 85*s.* to 87*s.* 6*d.* per cwt.; fine almondy part pinky block, 75*s.* to 80*s.*; pasty and stoney block, part mixed with mica, but part good almondy, 65*s.* to 67*s.* 6*d.*; very soft pasty, part pinky and almondy block, 60*s.* to 65*s.*; soft run in half empty cases, 55*s.* to 57*s.* 6*d.*; 43 cases of part heavy block and part softish pinky and almondy sold at from 57*s.* 6*d.* to 62*s.* 6*d.*, subject to sellers' approval; and 12 cases low dark brown block sold at 26*s.* to 35*s.*

BAEL FRUIT.—Five bales of good bright met with good competition at 6*l.* 4*d.* per lb.

BALSAM COPAIBA.—A case of clear West Indian balsam, all that offered, sold at 4*s.* per lb. Privately business has been done in genuine Maranham at 5*s.* per lb. There is plenty of "faked" stuff being offered from Hamburg at 1*s.* 9*d.* to 1*s.* 11*d.*

BENZOIN.—Steady. Practically no good quality was offered. Seven cases fair Sumatra seconds sold at 6*l.* 15*s.*, and 10 cases of fair thirds realised from 5*l.* 10*s.* to 5*l.* 15*s.* per cwt., and for 3 cases common thirds 5*l.* was paid. A large quantity of Palembang was offered, but no sales were made, buyers anticipating easier prices.

BUCHU.—The new crop of buchu has been larger than usual. In auction only small sales were made at easier rates, 4 bales selling at 10*d.* per lb. for fair round green. Two other bales of small round sold at from 9*l.* 2*d.* to 10*d.*

CAMPHOR.—Twenty cases of Chinese Fukien crude were held at 370*s.*

CANNABIS INDICA.—A small sale of Bombay tops was made at 4*s.* per lb.

CARDAMOMS.—The much-restricted offerings met with a good demand, and a general advance of 1*d.* to 2*d.* per lb. was paid, seeds being unaltered. The following were the prices: Ceylon-Mysore: Good bold long pale, 2*s.* 6*d.*; good pale smooth medium to boldish, 2*s.* 5*d.*; medium ditto, 2*s.* 1*d.* to 2*s.* 2*d.*; smaller ditto, 1*s.* 10*d.* to 1*s.* 11*d.*; small, 1*s.* 7*d.* to 1*s.* 8*d.*; pale splits, 1*s.* 9*d.* Boldish brown long, 1*s.* 11*d.* to 2*s.* 1*d.*; small to medium ditto, 1*s.* 9*d.*; small brown, 1*s.* 6*d.* to 1*s.* 7*d.*; brown and split, 1*s.* 6*d.* to 1*s.* 8*d.*; shells, 7*d.* to 8*d.* Good Bombay seed, 2*s.* 2*d.* per lb. Malabar and Mysore mixed small to medium brown (18 cases), 1*s.* 6*d.*

CASCARA SAGRADA.—For 31 bags of three-year-old the limit was 42*s.*, a bid of 41*s.* being refused. For a further 144 bags of one-year-old, offered without reserve, per Deucalion from Hong Kong, from 39*s.* to 40*s.* was paid, being steady.

CHIRETTA was rather lower; of 68 bales offered 20 sold at 3*l.* 2*d.* per lb., being about its normal value.

COCA-LEAVES.—Steady; good green Ceylon sold at 9*d.* to 9*l.* 2*d.*, fair ditto at 8*l.* 2*d.*, and sea-damaged at 5*l.* 2*d.* per lb. Seven cases of fair greenish sold at 7*d.*

COCAINE.—Owing to a rise in crude, and more activity, it is quite thought we are on the eve of an advance in the hydrochloride.

COCHINEAL.—Rosy blacks sold at 1s. 8d. per lb. Silvers were bought in at 1s. 10d.

COLOCYNTH.—Ordinary broken Turkey apple was limited at 8d. per lb., fair pale was bought in at 1s. 2d., and pulp was limited at 2s. 6d.

CUBEES.—Fair slightly stalky Java were held at 50s., and 20 bags of ordinary shelly of doubtful quality sold without reserve at 18s. 6d. per cwt. A further nineteen bags of doubtful quality also sold without reserve at 33s. per cwt.

CUMIN-SEED.—Fair East Indian seed is obtainable at 32s. 6d. per cwt.

ERGOT.—Privately Russian is quoted 1s. 1½d., new Russian 1s. 2d., new German 1s. 1½d., and Spanish at 1s. 4d. per lb., c.i.f. terms. In auction old sifted, slightly weevilly Spanish was bought in at 1s. 5d., and fair new sound slightly broken at 2s. per lb.

GALLS.—Twenty-two bags Persian galls sold without reserve at from 62s. 6d. to 72s. 6d. per cwt. for sea-damaged, and for a further 76 bags sea-damaged from 62s. to 72s. was paid. Privately, Chinese are quoted 53s., c.i.f.

GAMBOGE is steady. For fair bright Siam pipe, slightly blocky, 17l. 10s. was wanted.

GUAIACUM.—A bid of 7d. is to be submitted for fair glassy, slightly drossy block.

GUM ARABIC.—Four bags of fine pale soft Soudan sorts had been sold privately. For Madras pickings 15s. was wanted, bold pale and amber Aden siftings being held at 32s. Privately the market is tending higher for most acacias.

HONEY.—Quiet. Fair liquid St. Lucia (55 cases) was bought in at 22s.; brownish set Jamaica in barrels and casks realised 22s. 6d. to 23s., ordinary set at 20s., and for good yellowish set 25s. was paid; 168 cases of honey were offered without reserve, but no buyers were forthcoming.

IPECACUANHA.—Steady. Thirty-one bales East Indian sold at from 7s. 9d. to 7s. 11d. per lb. for fair, slightly country-damaged to good bold well-annulated native picked root. Only three bales of Rio were offered, of which one sold at 8s. 2d. for fair bright; one importer asks 8s. 6d. per lb. Cartagena was limited at 7s. per lb.

JALAP.—Analysing 6.2 per cent. resin was held for 6d. per lb.

KINO.—Good bright Cochin was held for 1s. 3d. per lb.

LIME-JUICE.—Three puncheons common brown unworked West Indian sold at 6d. per gal. without reserve.

MUSK.—For two packages of Cabardine a bid of 19s. is to be submitted.

MYRRH.—Five bales of Aden sorts were apparently sold as usual at 90s., and 3 bales siftings were held for 80s.

NUX VOMICA.—Good Madras realised from 8s. 3d. to 8s. 6d. per cwt. for 70 bags, sweepings realising 6s. 6d.

OIL, CINNAMON.—Two cases Ceylon leaf oil realised 2½d. per oz.

OIL, CLOVE.—For guaranteed B.P. (83 to 85 per cent. eugenol) 4s. 4d. was wanted, at which business has been done privately.

OIL, EUCALYPTUS.—An odd case of *Globulus* oil sold at 1s. 2d., and for 8 cases containing 45 to 47 per cent. of cineol 1s. was asked.

OIL, LEMONGRASS.—Twenty-one cases from Colombo, and containing 80 per cent. citral according to Parry's analysis, sold without reserve at 4d. per oz. Several other parcels were bought in at from 4d. to 5d. per oz.

OIL, LIME.—Fifteen cases of West Indian distilled just arrived sold readily at from 2s. 9d. to 2s. 10d. per lb.

OIL, PEPPERMINT.—Ten cases American H.G.H. sold without reserve at from 13s. to 13s. 3d. per lb., being from 3d. to 4½d. lower than the prices asked privately.

ORANGE-PEEL.—Fine bright Maltese strip of the new crop was offered at 1s. down to 9d. according to quality.

PAPAW-JUICE.—Ten shillings per lb. was suggested as the price for 4 cases of West Indian.

RHAPONTICA.—Fair French is worth from 31s. 6d. to 32s. to buy.

RHUBARB.—Steady; a case of small round and Shensi trimming-root sold at 2s. 10d. per lb., subject. Bold round Shensi, dull coat with three-quarters pale pinky fracture, realised 2s. 4d., and medium and bold ditto 2s. 1d. A case of High-dried Shensi with three-quarters pale pinky fracture sold at 1s. 6d.; 5 cases small to medium round horny High-dried with half fair pinky and half grey and dark fracture at 10½d. to 1s. per lb. Two cases medium to bold flat Shensi with three-quarters good colour, slightly wormy, brought 2s. without reserve. Several sales had been made privately.

SARSAPARILLA.—Grey Jamaica, of which 13 bales offered, excited keen competition, from 3s. 10d. to 4s. per lb. being paid for fair, an advance of 10d. to 1s. on the prices paid a fortnight ago. Seven bales of fair to good red Native Jamaica realised from 1s. 7d. to 1s. 11d. per lb., and for 11 bales of Lima from 2s. 9d. to 3s. 3d. was paid. For Mexican from 5d. to 6d. was wanted. Privately, Honduras is offered at 1s. 10d. per lb. spot, and Mexican at 5½d., c.i.f. terms.

SCAMMONY-ROOT.—Fourteen bales of sea-damaged sold at 10s., without reserve; for 100 bales of sound a guinea per cwt. was mentioned as the buying-in price.

SEEDLAC.—A bag of dull orange Karachi realised 10l. 2s. 6d.

SENNA.—Tinnevely sold at full-up prices, the quality being extremely poor. From 1d. to 1½d. was paid for common small yellowish specky leaf, 1½d. to 2d. for medium specky greenish, 2½d. to 2¾d. for bold but weak colour, and 4d. to 5d. for greenish. Pods sold at 1½d. to 2½d. per lb. Privately there is a keen demand for Tinnevely senna, but buyers' requirements are difficult to fill, owing to the absence of leaf at suitable prices and quality. Small green has been sold at 2½d. per lb. Some 250 bales of Alexandrian have arrived. A large business has been done lately, including three-quarters to whole leaf at 6d., broken at 3d. to 3½d., and siftings at 2d. to 2½d. per lb.

SUGAR OF MILK.—Five cases of Italian, guaranteed B.P., sold at from 53s. to 53s. 6d. without reserve. Privately, best American powder is quoted 60s. spot, and for prompt shipment and 1907 delivery 54s., c.i.f., is quoted from Hamburg.

TONKA-BEANS.—A bag of slightly sugar-damaged Para sold without reserve at 8½d. per lb. For fair frosted Para a bid of 1s. 2d. is to be submitted for a case. Good frosted Angostura were bought in at 2s. 9d.

WAX, BEES'.—Quiet, the only sale of Jamaica referring to a box at 7l. 12s. 6d. per cwt. for good. Good Egyptian was limited at 6l. 15s., a bid of 6l. 12s. 6d. being refused; fair bleached Calcutta was limited at 8l. 10s., fair part dark, Madagascar block at 6l. 17s. 6d., and a bid of 6l. 12s. 6d. is to be submitted for even Zanzibar block, twenty-seven bales of which were offered. Three trusses good bright African lying in Liverpool had been sold privately.

A NEW SECRET SOCIETY.

"THAT is what it is," said Mr. W. James Leggett, of Liverpool, to us over the telephone on Thursday afternoon. He was speaking from Armfield's Hotel in South Place, Finsbury, where an enthusiastic meeting of the first thirty-four members of the London and Provincial U.R. Druggists' Association had just closed. Mr. H. Barnes, of Stratford, was in the chair, and there was a good all-round discussion of the state of affairs in the ranks of the U.R. Mr. Barnes was elected President, and Mr. Leggett was appointed General Secretary for a year, at a salary. Four local secretaries were appointed, as well as other office-bearers; but wild horses—far less an Editor at the printer's—would not drag from Mr. Leggett what their names are. Well, the world still moves round, and Mr. Leggett has gone back to Liverpool to wait for about 200 half-guineas, which he expects to drop into the Association's treasury.

THE EGYPTIAN GOVERNMENT announces that tenders will be received for drugs up to March 20; full particulars are obtainable from Lieut.-Colonel Western, Queen Anne's Chambers, Westminster, London, S.W.

London Drug Statistics.

The following statistics are compiled from information supplied by public warehouses. They relate to the receipts and deliveries of some of the leading drugs from and into the London public warehouses for the month of January 1907, and to the stocks on January 31.

	January		Stocks		1907	
	Landed	Delivd.	1907	1906	Imprtd.	Delivd.
Aloes.....cs, etc.	36	133	232	415	36	133
".....gourds	210	172	38	50	210	172
Aniseed, star.....pkgs	—	—	—	—	—	—
Arrowroot.....pkgs	228	727	3,859	8,798	228	727
Balsams ... cks, etc.	5	61	1,377	1,943	5	61
Calumba.....bgs	—	33	360	248	—	33
Camphor.....pkgs	609	780	735	264	609	780
Cardamoms ..	396	197	1,464	1,814	396	197
Cinchona....."	420	390	5,073	7,831	420	390
Cocculus indicus ..	—	—	—	—	—	—
Cochineal....."	119	107	248	573	119	107
Cubets....."	—	2	540	478	—	2
Dragon's-blood....	—	8	120	89	—	8
Galls....."	371	177	1,506	191	371	177
Gums—						
Ammoniacum ..	—	1	10	33	—	1
Animi ..	85	63	213	301	85	63
Arabic ..	1,818	1,370	8,347	7,048	1,818	1,370
Asafetida....."	—	29	329	1,318	—	29
Benzoin ..	136	121	1,055	650	136	121
Copal....."	2,735	4,049	14,251	18,689	2,735	4,049
Damar....."	506	661	2,553	2,442	506	661
Galbanum ... "	—	—	—	—	—	—
Gamboge....."	9	23	70	5	9	23
Guaiacum ..	—	—	49	54	—	—
Kauri ... tons net	396	310	1,452	1,189	396	310
Kino.....pkgs	—	1	58	71	—	1
Mastic, E.I. ..	—	4	3	11	—	4
Myrrh, E.I. ..	22	14	208	79	22	14
Olibanum ... "	283	177	2,552	1,510	283	177
Sandarac ..	134	178	541	494	134	178
Tragacanth....	1,612	1,311	5,397	6,146	1,612	1,311
Ipecacuanha—						
Cartagena ... "	13	17	50	28	13	17
E.I. ("Johore") ..	47	30	35	26	47	30
Matto Grosso ..	5	12	57	91	5	12
Minas ..	4	4	18	41	4	4
Jalap.....bls	—	2	47	138	—	2
Nux vomica....pkgs	28	—	104	93	28	—
Oils—						
*Aniseed, star... cs	10	10	58	129	10	10
*Castia....."	20	12	27	81	20	12
Castor.....pkgs	81	170	191	259	86	170
Coconut ... tons	123	51	199	274	123	51
Olive.....cks, etc.	40	193	564	494	40	193
Palm.....tons	—	3	2	—	—	3
Quinine	12,531	12,837	206,284	173,774	12,531	12,837
Rhubarb.....lbs	52	23	226	202	52	23
Sarsaparilla....bls	79	80	67	114	79	80
Senna....."	410	111	1,694	3,158	410	111
Shellac.....cs	4,096	4,400	12,145	20,471	4,096	4,400
Sticklac....."	333	165	340	337	333	165
Turmeric.....tons	27	21	253	269	27	21
Wax—						
Bees'	703	608	2,281	1,933	703	608
Vegetable....."	10	102	123	107	10	102

* Stocks of essential oils at Smith's Wharf and Brewer's Quay are not included.

"CONCERNING OPIUM."—An informative article with this title is contributed to the current issue of "Chambers's Journal" by Mr. Algernon Warren. Mr. Warren's practical knowledge of the drug-trade ensures the accuracy of his statements, which are mainly historical.

ADULTERATION OF LEATHER.—In a recent issue of the "Shoe and Leather Record," a report on the analysis of five samples of red leather, recently made at the Leicester Technical School, was given. The analysis showed that one sample contained 9 per cent. of "Epsom salts, including alum," and 22 per cent. "soluble matter." The others contained (2) 3.5 per cent. and 4 per cent., (3) 2 per cent. and 3 per cent., (4) 1.2 per cent. and 0, and (5) 2 per cent. and 1 per cent. "Soluble matter," according to the "Record," may mean an excess of tanning material due to dosing—probably with strong extracts. The worst sample was specifically loaded with glucose, and contained an excessive amount of moisture, which was retained by the glucose. As a general rule, it may be taken that anything that is either soluble or which can be dried out under ordinary conditions of work and wear is not leather, whatever else it may be.

Foreign Trade Statistics.

The following table shows the imports and exports of drugs, chemicals, etc., to and from the United Kingdom for the months of January 1905, 1906, and 1907, as given in the Board of Trade returns:

Drugs, Chemicals, etc.	Imports.		
	1905	1906	1907
Bleaching-materials ... cwt.	19,678	16,807	13,431
Boron compounds ... "	18,428	40,280	21,181
Brimstone ... "	33,985	48,316	37,198
Coal products, not dyes... "	2,652	7,430	9,276
Cream of tartar ... "	5,106	4,474	6,032
Glycerin ... "	3,631	3,239	5,093
Muriate of ammonia ... "	360	924	278
Saltpetre ... "	14,914	17,755	20,778
Soda compounds... "	31,272	316,777	26,922
Sulphuric acid ... "	2,800	8,248	5,000
Tartaric acid ... "	2,824	3,851	2,487
Unenumerated chemicals £	148,922	170,124	203,333
Cinchona ... cwt.	2,749	3,054	1,616
Quinine and salts ... oz.	66,852	121,772	653,375
Unenumerated drugs and medicines ... £	97,690	96,190	98,593
Alizarine and alizarine dyes ... cwt.	3,934	3,720	3,148
Aniline ... "	13,998	12,527	14,166
Synthetic indigo... "	2,418	4,590	4,632
Other coal-tar dyes ... "	341	159	31
Indigo ... "	361	1,616	948
Quicksilver ... lb.	—	7,633	28,148
Gum arabic ... cwt.	14,480	3,162	11,989
Shellac, etc. ... "	9,568	7,821	10,039
Turpentine ... "	31,290	36,602	44,511
Soaps, household ... "	22,314	25,345	32,532
Toilet-soap ... "	1,564	1,346	1,603
Drugs, Chemicals, etc.	Exports.		
	1905	1906	1907
Bleaching-materials ... cwt.	65,437	92,143	102,254
Coal products, not dyes—			
Aniline and coal-tar oils ..	18,361	102,382	250,297
Carbolic acid ... "	6,485	11,844	11,963
Naphthaline and anthracene ... "	6,873	4,975	5,912
Other sorts ... "	933,398	1,174,859	1,125,946
Copper sulphate ... tons	6,041	2,081	2,921
Cream of tartar ... cwt.	131	115	105
Dye-stuffs—			
Products of coal-tar ... "	4,759	4,733	3,938
Other sorts ... "	10,349	17,075	18,619
Glycerin ... "	11,686	12,912	22,180
Chemical manures ... tons	30,898	46,171	50,551
Quinine and salts ... oz.	58,268	94,056	102,430
Unenumerated drugs and medicines ... £	114,246	126,471	121,955
Ammon. mur. ... cwt.	10,139	10,730	16,610
Painters' colours ... "	123,180	164,124	168,538
Soda, ash ... "	135,115	111,001	193,937
Bicarb. ... "	37,354	17,973	34,617
Caustic ... "	137,664	128,773	158,012
Crystals ... "	18,916	12,060	8,653
Sulphate... ..	25,488	65,838	81,064
Other sorts ... "	30,127	26,039	32,977
Sulphuric acid ... "	8,885	9,904	4,839
Tartaric acid ... "	181	60	417
Unenumerated chemicals £	208,351	223,309	233,700
Soap, household ... cwt.	109,146	99,379	98,466
Toilet-soap ... "	3,337	3,223	3,378
Drugs, Chemicals, etc.	Re-Exports.		
	1905	1906	1907
Gum arabic ... cwt.	4,847	1,496	1,543
Shellac and other lacs ... "	10,458	5,566	5,520
Quicksilver ... lb.	286,150	311,456	264,525
Boron compounds ... cwt.	—	60	5
Coal products, not dyes ..	24	508	1,047
Cream of tartar ... "	1,143	500	689
Glycerin ... "	1,057	440	3,253
Muriate of ammonia ... "	330	322	120
Saltpetre ... "	2,137	1,149	507
Sulphuric acid ... "	20	—	—
Tartaric acid ... "	196	652	205
Unenumerated chemicals £	6,339	10,509	16,225
Cinchona ... cwt.	676	1,001	511
Quinine and salts ... oz.	6,233	2,186	2,058



B.P.C. in Manchester.

SIR,—With reference to a statement which appears in your issue of this week concerning the forthcoming visit of the British Pharmaceutical Conference to Manchester, may I be allowed to say that the remark as to the amount of the local guarantee fund is entirely unauthorised and inaccurate?

Yours faithfully,

WILLIAM KIRKBY,

Manchester, February 9. Hon. Local Secretary.

Lemongrass Oil.

SIR,—I have noticed the correspondence in these columns in reference to lemongrass oil, and can confirm Messrs. Umney and Bennett in the fact that certain abnormal lemongrass oils yield to sodium-bisulphite solution more than can be accounted for as citral. I have recently examined a sample of sp. gr. 0.868, which showed an apparent citral value of 80 per cent. This would necessitate the presence of about 10 per cent. of constituents with a sp. gr. below 0.800, which is most improbable. In regard to West India lemongrass oils, it is certain that if the aldehydes be not entirely citral they are such as to yield artificial-violet perfume of very similar character to ionone, and the makers of ionone and other violet-perfumes find that they answer well for the purpose of the manufacture of these perfumes.

Yours faithfully,

February 11.

ERNEST J. PARRY.

A Truce.

SIR,—I quite agree with you in thinking that if the Government proceeds with the Poisons Bill in the coming Session we must have the Pharmacy Bill before the House. It was only on the understanding that the Government would agree not to proceed during the coming Session with the Poisons Bill that I suggested it might be well for us to let the Pharmacy Bill rest meantime. I do not think it would be difficult to get the Government to fall in with this. We could, meantime, proceed with the education of members of Parliament regarding matters pharmaceutical—and so, of course, could the other side. It is plain that the Government is bracing on its armour this Session for a veritable war of the Titans. (I may say, in the interests of careful critics like Mr. Bell, that I understand the House of Lords to represent the Titans, and the House of Commons in some ways resembles Zeus.) There is every reason to suppose that the Lords will have so much about themselves to think of that some of our more pronounced enemies among them will not be so reckless in their attacks on the honestly earned privileges (if they choose to call just rights privileges) of perfectly honourable men. In any case there is likely to be too much clashing of arms and "stoor" of battle in the coming Session for a quiet little Bill like ours to have a fair chance of attention.

Dumfries, February 11.

JAMES REID.

Bookkeeping.

SIR,—“Methodical Retailer” is to be congratulated on having the courage of his convictions. He may further be complimented on the felicitous style in which those convictions are recorded. All the greater pity, therefore, that a man of such capacity should be found advocating a method of bookkeeping which, in so many directions, runs counter to established usage. A reference to any of the text-books would prove to him that there is only one system of bookkeeping, properly so called. This is governed by certain definite and unalterable principles which, once grasped, may be adapted to the needs of any kind or size of business whatsoever. It is no more difficult to keep books in accordance with these principles than to devise a system in which all the recognised rules are set at defiance. The books need not be so numerous or so elaborate in a small business as in a large one, but the underlying system should be identical. It is, unhappily, too true that unless a youth learns bookkeeping at school, or attends classes afterwards, he will probably grow up in the pharmaceutical calling without any real acquaintance with that science. The average small

chemist keeps his books in a very perfunctory manner, and does not impart even what knowledge he may possess to his apprentice or assistant. In larger businesses, on the other hand, a clerk is kept, or the bookkeeping is entrusted to an accountant. I agree with Mr. Walter Bean that a good business-man, be he chemist or any other trader, should be able to find more profitable employment for his time than the unproductive drudgery of bookkeeping. By all means let that work be delegated to an employé. But I join issue with your correspondent when he suggests that the pharmacist himself need know nothing about the matter.

Yours truly,

Brighton, February 11.

C. S. ASHTON.

SIR,—I must congratulate you on the many practical articles you serve us with from time to time. I was very interested in the bookkeeping one in the Winter Number, also J. Mack's some time back. We want educating a lot more in that line yet. I thought Mr. Ashton was rather unmerciful with our friend's article. We have not all the same class of business to do, nor the same education.

Yours truly,

R. AITKEN.

More Protection Wanted.

SIR,—At the last meeting of the Council of the Glasgow and West of Scotland Chemists' Association it was decided to confirm the recommendation of the Trade Committee of this Association to ask you to publish the letter which has been sent to a number of manufacturers of proprietary articles together with a list of those to whom it was sent and to indicate their replies to same. I append a copy of that letter, the list of those firms to whom it was sent and an indication of their replies.

Yours faithfully,

J. H. HART.

GENTLEMEN,—We again respectfully draw your attention to the fact that your preparations are being sold at a price that is not yielding a satisfactory profit to the retail trade.

We believe this cutting of price is due to the non-protection of the retail price, either through the P.A.T.A. or some other form of protection, and the members of our Association are unanimously of opinion that you should now protect the minimum retail prices, preferably through the P.A.T.A. They consider that at least 20 per cent. profit should be allowed to the retailer for his share in the storing and distribution of your goods, with a further allowance of from 7½ to 10 per cent. to the wholesaler for his share of the work.

The Council of our Association have just completed a very careful and extensive canvass of the Glasgow and district chemists, in regard to price-protection, etc., and the opinion of all its members was that this matter should be taken up at once and that every manufacturer of non-protected and unprofitable preparations should be written to regarding this matter. At a large meeting of our Association held in November it was resolved that this appeal should be again made to your firm.

In submitting these proposals to your firm you can see that the members of our Association are willing to assist you in the distribution of your goods. In the event of your not agreeing to assist them in any way the members decided to give all their support to the firms who recognise the reasonableness of their demands. They propose doing this at an early date, and all goods or preparations that are not protected in price are to be left severely alone, and showcards or printed matter relating to them will not be accepted or shown by our members.

The Glasgow Chemists' Association embraces a wide area and a population of about a million and a half, and the unwillingness to sell non-protected goods by so large a number of the trade must cause serious loss to the manufacturers.

We trust, therefore, that you will give this important matter your prompt and favourable attention, and an early reply will be esteemed.

We are yours faithfully,

Signed on behalf of the Association by

J. P. GILMOUR (President).

W. L. CURRIE

J. W. SUTHERLAND } (Vice-Presidents).

JAMES LENNOX (General Secretary).

J. H. HART (Secretary of Trade Committee).

Signed on behalf of the wholesale trade by all the Glasgow representatives.

[In reply to our request Mr. Hart informs us that the Association has not received from the firms mentioned in the list permission to publish their letters or the “indication of their replies.” We accordingly reserve the list, which refers to thirty-four firms, of whom fifteen had replied up to February 9.—EDITOR.]

Looking Ahead.

SIR,—The scarcity of qualified men in 1920 is a long way off, and even that is not our worst trouble, but the increase of the drug-stores. Instead of opposing Lord Crewe's Bill, chemists ought to welcome it as giving them a chance to open branches under juniors in districts where a fully qualified manager would mean keeping open shop at a loss. Every town needs such drug-stores; most towns have them even now. Why not, then, chemists' branches to sell the hundreds of homely articles of everyday demand, plenty of trade, and no demand for poisons? As to the last I find 6s. worth of poisons out of total takings of 60l. in one month in a town of 60,000. Who on earth pretends that a qualified man is needed there? As for prescriptions, why you yourself have declared that nine-tenths of the dispensing in England and Wales is done by the doctors themselves. Even if a chemist has a big shop in the centre of a big town or city he has to load himself up to the very eyes with drugs and patents in order to be able to compete in price with companies. Small branches would help him out, would bring the things to the very doors of the poorer classes, and would enable him to clear out his stocks; but it cannot be done if you have to pay 2l. a week for a manager. As for the assembling of the local Associations, and the windy warfare we may expect, what has Parliament to do with the settlement of our woes? M.P.s know quite well of the great changes in the drug-trade (owing to the doctors dispensing and the advertising of patent medicines, etc.); they have no sympathy with the silly aspirations of our useless Society; they know all about drug companies, and we might just as well admit that these companies are here to stop, and we have to live in spite of them, which we can do, and that right well, and we can set our own house in good order without any appeal to Parliament by having our Society help us with our Labour Question, viz.:

1. A new and suitable Preliminary examination at 5s. or 10s.
2. A Licence examination, fee 10s. to 20s.
3. A new Minor, subjects divided, fee 2l. to 3l.
4. A new Society, subscription of 5s. a year (no school or journal to keep up).
5. A modified examination for men who have been in business ten to fifteen years.

This would settle the present drug-store trouble, bring them in (they have every right to be in), and when the Government Poison Bill comes on it cannot hurt us: it will but deal with the wants of the public.

At present the little grocers' shops are dealing with trade which chemists might have if they could employ licensed assistants as in Ireland. ISHMAEL. (34/55.)

Letters in Brief.

ITINERANT PHOTOGRAPHERS.—A *Subscriber* (144/5) asks us to warn chemists against two travelling photographers, said to be retired army men, who seek to obtain goods on credit. Our correspondent is desirous of knowing their whereabouts.

SODIUM SALICYLATE.—R. A. (35/90) writes, in view of the revision of the British Pharmacopœia, to suggest more exact demands for the purity of salicylate of sodium. He feels quite sure that a large quantity of the foreign salicylate is not pure enough for dispensing purposes. [Probably such samples do not meet the present official requirements.—ED.]

CHEMISTS' ASSOCIATIONS.—A *Member* (36/9) wishes to remind "Jay Mack" that when he was a Boot's manager he sought admission to a chemists' association. "A Member" now wonders why, if he is the successful, sensible modern chemist he professes to be, he was so anxious to take part in the windy warfare which he alleges goes on? If associations, adds "A Member," took up the teaching and examining of their apprentices, as he suggests, instead of their having crowded meetings they would undoubtedly become extinct.

NON-ALCOHOLIC QUININE-WINE.—F. C. S. (31/45) writes: "I cannot understand how it can be sold as B.P. quinine-wine, seeing that the Pharmacopœia distinctly states that vin. quinine should be made from orange-wine. There is, however, a much more serious matter in connection with this wine which should not be overlooked. I have recently tested three different brands of this preparation, and in all cases have found the wine preserved rather heavily with salicylic acid. For sick persons this is an undesirable addition. The food and drugs inspectors would not prosecute if not more than 1 grain of salicylic acid per pint be present, but I have found a much greater amount."

LIQ. CRESOLI SAPONATUS.—In reply to Dr. L. F. Hemmans, *Miss G. E. Bartrop* regrets that she is unable to publish the

formula she uses, as it was given to her in confidence; but the main lines of the formula are those of the preparations of the German and United States Pharmacopœias, viz.:

German.—Soft soap, 1 part; melt on a water-bath, and add crude cresol 1 part (by weight), mix, and heat the solution until it forms a clear yellowish-brown fluid.

United States.—Cresol, 500 grams; linseed oil, 350 grams; potassium hydroxide, 80 grams; water, a sufficiency. Dissolve the potash in 50 grams of water, add the linseed oil, mix thoroughly, then add the cresol, and stir until a clear solution is produced. Make up to 1,000 grams with water.

WATER-ANALYSIS.—Mr. J. A. Hughes writes thanking "Abel Scholar" for his friendly comments on the short scheme published in our Winter Issue, and adds: "As to the case of the city water-supply cited by 'Abel Scholar,' followers of my short scheme could not very well go astray, as the evidence of purity afforded by the other tests would more than counter-balance any adverse conclusion drawn from the nitrite-test. In respect to the iridescence seen after evaporation of a polluted water in a platinum dish, I took it for granted that the average pharmacist would not possess such a costly piece of apparatus. Those who do should make a note of the test. The excellent test for urea suggested by 'Abel Scholar' would certainly be useful in special cases; but I scarcely think there would be many waters so grossly contaminated as to yield positive results with that test."

Dispensing Notes.

What is Mucilago?

SIR,—What is required in a prescription for an emulsion when *mucilaginis* appears? There seems to be two factions, one of wide experience in good and what in anti-Socialist times were dubbed "historic houses," and another not so historic, but matter of fact, who contend that something different is required. What must the novice do when left to his own devices if the major (or minor) domo of the college, school, or class has not had time to advise him, owing to the shortness of the "course" (anything from three days to three months), or some other equally good or bad reason?

Yours faithfully,

ABEL SCHOLAR.

What can You Do

with this to make a presentable mixture? The ferri tart. and arsenic seem to form an insoluble hydrate. Your readers' views on the matter will be interesting.

Calcii chlor. ...	...	...	...	3j.
Ferri tart. ...	...	...	...	gr. xxiv.
Liq. Fowleri ...	...	...	...	℥xxiv.
Syr. aurant. ...	...	...	...	℥ss.
Aq. ad ...	...	...	...	℥iv.

M. Ft. mist.

3ij. ter die c. aq.

J W. H. (31/16.)

Legal Queries.

See the "C. & D. Diary, 1907," for much legal information as to all trade matters. In any circumstance not covered by the articles therein, state the case explicitly with all particulars and submit to the Editor.

Z. A. W. (33/52).—Interest on debts cannot be recovered unless the debtor has promised to pay it. A statement on overdue accounts that 5 per cent. interest will be charged if they are not paid on a specified date will not entitle you to recover the interest. Try to get your slow-paying customers to agree in writing to pay interest.

J. N. H. (33/65).—"Wood Vinegar" and "Pickling Vinegar" are safe descriptions of a mixture of acetic acid and water. There have been plenty of convictions for selling this mixture, but only when it has been represented to be the malt or wine vinegar.

Assistant (35/36).—Any interest that there may be in your question is discounted by the fact that the few who do not know that acetate of lead is not a scheduled poison would find it out by referring to p. 243 of our *Diary*. Upon that the rest of your letter depends.

Fire (139/30), after being eight years in his present premises, has been asked by the landlord to pay fire-insurance for the whole term. His lease states that a sum additional to rent shall be payable for fire-insurance on demand. [If the lease is under seal (which is no doubt the case) there is, we think, nothing to prevent the landlord recovering rent in arrear for eight years, and as the insurance is reserved for extra rent we think the landlord would be entitled to recover. If he has paid an unreasonable amount

of premium, that is another matter. In this case possibly an application to the insurance company might result in the excessive premium being refunded. We are afraid that our subscriber could not successfully defend an action for recovery of the arrears.]

Miscellaneous Inquiries.

We endeavour to reply promptly and practically to trade questions of general interest, but cannot guarantee insertion of replies on a particular date, nor can we repeat information given during the past twelve months.

A. C. S. (21/31).—COMPOUND SYRUP OF CAMPHOR.—The formula which originated at the Bristol Royal Infirmary has become well known as producing an excellent cough-mixture. The recipe as given in "Pharmaceutical Formulas" is as follows:

Acidi benzoic. ...	...	...	...	3iij.
Acid. acetic. glacial. ...	...	...	...	3iij. 5v. mxx.
Aceti scillæ ...	...	...	...	Oij.
Aceti ipecacuanhæ ...	...	...	...	Oij.
Ol. anisi ...	...	...	...	3ij.
Camphoræ ...	...	...	...	5ij.
Tr. opii ...	...	...	...	3x. 5v. mxx.
Sacchar. alb. ...	...	...	...	lb. xxviij.
Sacchar. ust. ...	...	...	...	q.s.
Aq. ad ...	...	...	...	Cong. iv.

M.

Dose: 3j. (=tr. opii mj.) occasionally.

X. Y. Z. (15/18).—(1) DYEING FEATHERS.—The older process is by the use of baths of (1) sodium carbonate, (2) ferric nitrate, and (3) logwood and quercitrine. The first bath renders the feathers less brittle, a rinsing with warm water follows, and the logwood bath is used at the boiling-point. A dressing of an emulsion of oil in solution of potassium carbonate is usually given before finally drying. The modern process is that invented by Erdmann. It consists in the use of a solution of para-amidophenol, or a paradiamine, followed by treating with a solution of either benzo- or tolu-quinone, or an oxidising-agent, such as hydrogen peroxide, ferric chloride, or a permanganate. In this way fast shades of brown to black are produced. (2) The only book on feather-dyeing with which we are acquainted is "The Practical Ostrich-feather Dyer," by A. Paul, revised by M. Frank, published by the "Textile Colorist," Philadelphia, at \$5.

Vezatus (22/24).—CHEAP SALINE.—The following is from "Pharmaceutical Formulas":

Sodii bicarb. ...	...	...	...	3ij.
Pulv. ac. tartaric. ...	...	...	...	3iss.
Pulv. pot. acid. tart. ...	...	...	...	3iss.
Pulv. sodii sulph. exsic. ...	...	...	...	3j.
Pulv. sacch. alb. ...	...	...	...	5vj.

Misce.

The price can be still further reduced by increasing the proportion of sugar, but the product suffers in its effervescing properties.

G. H. W. (Trinidad) (23/61) writes: "What is good to put in rum so as to relieve those who drink it of a disagreeable odour which it leaves in the mouth, also to cut it of a harsh burning taste in the throat?" Perhaps some reader with experience in spirit-blending can supply the information.

Queror (20/17).—COLOURING BILLIARD-BALLS.—The method of doing this—applicable to all ivory balls—was last given in the *C. & D.*, November 21, 1903, p. 854. It is also given in detail in "Pharmaceutical Formulas," but is too long to repeat in this column.

Kirkland (24/64).—POWDER FOR MAKING LOTION for sprains and windgalls in horses.—This is a mixture of equal parts of plumbi acet. and zinci sulph., disguised with a little coloured chalk.

W. H. R. (27/54).—CHRYSAROBIN PENCILS.—The formula used at St. Mary's Hospital, London (*Baculum chrysarobini*), is—

Chrysarobin ...	...	...	...	3 parts
Wax ...	...	...	...	2 parts
Lanolin ...	...	...	...	5 parts

These pencils are obtainable from W. Martindale, 10 New Cavendish Street, London, W., the manufacture being a matter of the particular mould required.

Fruit (142/10).—PRESERVING FRUIT.—The direction paraphrased read, thus: "It is not necessary after removing apples from the formalin solution to immerse them in water if they are intended for storing." The direction, therefore, literally refers to apples, but the context shows that other fruits with skins (e.g., pears) may be treated similarly when they are to be stored.

J. H. M. (Cape Colony) (21/35).—(1) TOBACCO-ASH.—The leaves of tobacco are improved as regards burning qualities by sprinkling with solution of potassium carbonate, calcium acetate, potassium nitrate, or potassium acetate. These chemicals also influence the colour of the ash when the tobacco is burnt. Tobacco treated with calcium acetate yields a very white ash, which smokers take to be evidence of the excellent quality of the weed they are smoking. (2) **INVALID MALT BEER.**—This was referred to in the *C. & D.*, October 5, 1901, as the product of the King's Brewery, Copenhagen. The London agents were the United Breweries Co., Ltd., 46 Queen Victoria Street, E.C.

J. L. (23/60).—(1) You may dissolve the indiarubber tubing in purified carbon bisulphide, and use it to make bottle-capping. Oxide of zinc added to it will make it white.

Vet. (25/10).—SCURFY KITTEN.—Give it 5 drops of syr. ferri iodid. three times a day, and wash the parts with the following lotion every night:

Chinosol. ...	...	...	...	gr. xxiv.
Glycerini ...	...	...	...	3ss.
Aquam ad ...	...	...	...	3xij.

W. A. (28/66).—COLLINGS'S SPRAY.—The investigations of Mr. W. E. Collinge, of Birmingham University, on winter-spray fluids for destroying the eggs of the mussel scale, plum aphid, and apple-sucker, led to the conclusion that the best results are obtained from the following:

Caustic soda (98-per-cent.) ...	...	...	2 lb.
Soft soap ...	...	...	1 lb.
Paraffin ...	...	...	5 pints
Soft water ...	...	...	10 gals.

Dissolve the soap in a gallon of boiling water, and while still hot add the paraffin, beating up well, then pump into another vessel through a spray nozzle. Separately dissolve the caustic soda in 9 gals. of rainwater, and mix the paraffin emulsion with it. The foregoing is from the report of the Board of Agriculture. Mr. Collinge's investigations on the black-currant gall-mite [*Eriophyes ribis* (Nalepa)] are also the subject of an earlier monograph published by J. G. Hammond & Co., Ltd., Birmingham (6d.). In this the mite's life, history, habits, locale, and description are recorded. There various methods given for destroying the mite are—

1. Fumigation by prussic acid, which destroys mites but not eggs.

2. Spray fluids. These are useful only during the migration season. At Woburn petroleum, calcium sulphide, and carbolic acid proved ineffective, as did also S.V.M., naphtha, a saturated solution of naphthalene in naphtha, a 2-per-cent. solution 0.5 and 0.1 solution of formalin. Turpentine, undiluted petroleum, petroleum emulsion, 1 part of petroleum, 5 water, 2 soft soap, applied once a month with a brush.

3. The natural enemies are lady bird beetles.

Mr. Collinge's most recent experiments have, as stated, yielded the above formula and directions, and this, we presume, is what you want.

E. R. (35/8).—To bring your knowledge of chemistry up to date generally we do not think you can do better than read Ramsay's "Modern Chemistry" (Dent, 2s.). It is a readable little work, and by the time you have got through it you will have no difficulty, if you so desire, to supplement it by more specialised books.

Joe (33/23).—BOOKS ON DOGS.—See veterinary bibliography in the *Chemists' and Druggists' Diary*, 1906.

J. W. (35/26).—BLACK BEER, otherwise stout and porter, is a variety of household beer in which high-dried malt (black malt) is used. Are you not thinking of spruce-beer?

H. H. (31/7) informs us that a friend in Lucknow has written to him as follows:

I have had toothache lately, and when one of my servants heard of it he produced some flowers from the garden, which one at a time were placed against the aching tooth and the teeth closed.

It sets up a great heat and increases the flow of saliva very much, and for the time being certainly gives relief.

In shape it is like a miniature ear-sponge, not unlike the fuses match (the old Vesuvian), only the head a little larger. Its Indian name is "Moondi." It is evidently a very powerful astringent.

"Mundi" is *Sphæranthus indicus*, L. The flowers are substantially as described. The herb is used as a tonic, deobstruent, and alterative. It is used for glandular swellings in the neck, urethral discharges, jaundice and other bilious troubles, cough, and as a stomachic.

Hercules (28/12).—MILK OF MAGNESIA.—See "Pharmaceutical Formulas," p. 658. See Sutton's "Volumetric Analysis" for the other matter.

Pains (35/41).—Your No. 1 LINIMENT is, we think, the best; but why use belladonna in it? Replace it with soap liniment, so as to give a little more lubricant.

DISPENSER, qualified lady, seeks re-engagement; good references. Cooke, Patchetts, Caton, Lancaster.

AS general permanent Assistant; unqualified; abstainer. "Rhei," 8 Melville Road, Winton, Bournemouth.

ASSISTANT or Manager; tall; good London and provincial experience; 36. Gilbert, 7 Avenue Road, Southall.

UNQUALIFIED; 29; Assistant or Branch; experienced; outdoors. Gibbons, Grange Street, Burton-on-Trent.

JUNIOR; unqualified; outdoors; good references; Yorks preferred; moderate hours. Lill, Gringley, Doncaster.

NORTH.—Store and varied experience; good references. "Chemicus," 2 Sceptre Street, Newcastle-on-Tyne.

MANAGER; unqualified; 33; good all-round experience and references. "W. S.," 183 Ashmore Road, Paddington, W.

QUALIFIED; 26; tall; good experience and references; Photography. Wainwright, Chemist, Marchington, Staffs.

MANAGER or Assistant; qualified; 30; experienced; good references. "Radix," 28 Mimosa Street, Fulham, S.W.

JUNIOR; 21; London or near; in or out doors; time for study; Photography. "P. G.," 28 Riverdale Road, Plumstead, S.E.

MANAGER or Senior; 32; Pharmaceutical Chemist; good all-round experience and reference. 38/52, Office of this Paper.

ASSISTANT; 26; tall; 9 years' good experience; outdoors; permanency; references. S. Hebden, Church Parade, Oakengates.

MANAGER; qualified; all-round experience; Extractor; moderate salary; disengaged. "Chemist," 118 Lowden Road, Herne Hill, S.E.

JUNIOR or Improver; aged 20; Manchester district; good situation (indoors); with time to attend classes. 156/11, Office of this Paper.

JUNIOR; indoors; aged 19; experience in Counter, Dispensing, and Photographic trade. Apply, Chas. W. Playfoot, 140 High Street, Tonbridge.

WANTED, Dispensership; aged 19; 4 years' experience with Doctor in private practice. Apply, A. Haylett, 155 Palgrave Road, Great Yarmouth.

QUALIFIED; 23; 5 ft. 9 in.; West End or South Coast, in good-class Dispensing business; highest references. "Tropine," 110 High Street, Margate.

LONDON.—Assistant; unqualified; outdoors; varied experience; good reference; disengaged February 16. Morris, 80 Corporation Street, Plaistow, Essex.

BRANCH Manager or Assistant; 45; qualified; active, obliging; Photography; over 4 years in present situation. North, 63 Market Street, Ashby-de-la-Zouch.

EXPERT Manager and Organiser.—Experienced; disengaged 26th inst.; terms moderate. "J. H. W.," Registered Chemist and Dentist, 60 Park Road, Blackhill, R.S.O.

35/- weekly; Hall qualification; good experience; abstainer; Extractor; formerly best Chemists Manchester; 43; 5 ft. 7 in. "Instantan," 21 Nelson Street, E.

YOUNG Man (aged 19) seeks situation as Improver in Retail Chemist's shop; 5 years' experience in Doctor's Surgery; good references. "W. W.," 6 Gwyn Street, Bedford.

BRANCH; sole charge; experienced; Prescriber; Extractor; town and country; reliable; permanency; unqualified. "Radix," o/o 12 Woodliffe Street, Church Lane, Manchester.

34; Assistant or Branch; competent, reliable, obliging; good at Counter, Dispensing, Prescribing, Extractions, etc.; outdoors; disengaged. "Chemicus," 55 Fore Street, Redruth, Cornwall.

ASSISTANT or Branch Manager; 27; tall; single; all-round experience, exceptional Photographic; outdoors; disengaged; unqualified; capable and trustworthy. "Verax," Rock House, Clevedon, Somerset.

TYNESIDE.—27; unqualified; married; Extractor; good salesman and counterman; Prescribing, Store, and Mixed experience; local travelling as part duties entertained. "Energetic," 71 Cuthbert Street, Bensham, Gateshead-on-Tyne.

ASSISTANT; 26; disengaged; height 5 ft. 8 in.; unqualified; 10 years' experience; reliable; Dispenser, Counterman, Extractor, Prescriber, Photography; abstainer; best references. State salary, Hensbury House, 52 Malmesbury Park Road, Bournemouth.

APOTHECARIES' Assistant; qualified; gentlemanly appearance and address; aged 25; teetotaler; thorough taste for Surgery, Medical work; reliable, neat; accurate Dispenser; engagement Doctors, Surgeon's Dispensary, Surgeons; good testimonials; in or near London. State salary, 155/13, Office of this Paper.

EVENING or Saturday afternoon (from 3 P.M.) engagement sought by qualified man. 155/29, Office of this Paper.

UNQUALIFIED, London or suburbs, outdoors, desires permanency; excellent references; aged 24; tall, good appearance. 155/16, Office of this Paper.

JUNIOR; unqualified; 23; good Dispensing and Counter experience; London preferred; disengaged March 2. Apply, 156/60, Office of this Paper.

ASSISTANT; qualified; 26; tall; good experience; excellent references; married; permanency desired. Smith, 40 Clarendon Street, Nottingham.

QUALIFIED; Manager or Senior; first-class experience in Retail and Dispensing business; partnership entertained. Address, 155/4, Office of this Paper.

MIDDLE-AGED, qualified, single, Manager or Assistant, desires permanency; good Prescriber; disengaged; reliable. "D. C." (155/9), Office of this Paper.

UNQUALIFIED; Manager or Assistant; 37; 5 ft. 8 in.; married; good all-round experience; capable and trustworthy; reference. 137 Francois Avenue, Southsea.

DENTAL; part-time Pharmacy; 10 years' experience; own outfit; unqualified; abstainer; Photographic; 29. "Denture," Redleaf, Sandhurst Road, Tunbridge Wells.

30/- weekly; outdoors; qualified; engagement immediately; Management or Assistant; Extractor, Prescriber, Surgical; teetotaler; testimonials. 155/103, Office of this Paper.

DISENGAGED; smart unqualified Assistant; 25; good all-round experience; Dispensing, Photography; thoroughly capable of Managing; outdoors; London, W., preferred. "Ajax," 24 St. Kilda Road, West Ealing.

WHOLESALE.

ASSISTANT; Wet, Dry Counter; aged 22. Haines, 12 Downham Road, N.

BUYER or Traveller and Clerk; 25; good knowledge of the trade. 155/8, Office of this Paper.

WHOLESALE; 3 years' apprenticeship Retail experience and 5½ years as Assistant Wholesale. 152/20, Office of this Paper.

MAJOR requires Analytical work in Wholesale Laboratory; young and experienced; square training. 148/15, Office of this Paper.

REPRESENTATIVE; good connection; salary or commission and expenses; West and South Wales. 153/4, Office of this Paper.

WHOLESALE.—Junior (23) seeks situation; willing to commence with small salary; good references and Retail experience. Apply, 156/6, Office of this Paper.

CORRESPONDENCE is invited with Manufacturers and others who desire Representation in Canada; I have wide acquaintance; best reference. Address, 136/39, Office of this Paper.

AS Representative of a good house for South Africa; many years' experience; large sound connection, and well known both in Africa and this country. "F. S." (151/31), Office of this Paper.

ADVERTISER (23) desires position of trust (London preferred); 7 years' good experience; able to control; accustomed to Patents, Sundries, Surgical, Manufacturing, etc. 151/16, Office of this Paper.

TRAVELLER; disengaged; London and suburbs only; Sundries, Drugs, Perfumery; well known; sound connection; 15 years' experience; highest reference; commissions or agency entertained. J. Wright Kirby, 29 Minet Avenue, Harlesden, N.W.

SWISS.—Corresponding German, French, good knowledge of English; typewriting; 8 years' experience Wholesale and Retail; well acquainted with Drugs, Chemicals, and Sundries; 20s. weekly; good references. Merkur, 328 Green Lanes, London, N.

AS Representative.—Gentleman, of good address, well educated, widely experienced in Drugs, Chemicals, and Chemical-processes, and accustomed to the introduction of new ideas, desires an appointment with firm of good standing. Address, 152/19, Office of this Paper.

GENTLEMAN, qualified Chemist, wishes to Represent a well-known Drug or Speciality house; salary or good commission; at present visiting the principal towns of the North, Midlands, and West of England on business unconnected with the trade; he would have ample time to do thorough justice to any appointment undertaken. "Pax" (153/31), Office of this Paper.

AGENTLEMAN representing an important English manufacturer for over 10 years, throughout the Continent, Levant, and Egypt, and who speaks English, French, German, Russian, Italian, Spanish, and Scandinavian fluently, and has a good connection in those countries, would be inclined to represent a second house; highest references and security; only first-class houses need write. "Traveller" (154/11), Office of this Paper.

MISCELLANEOUS.

THE FIRST CHEMIST

who takes up "Sight Testing" as a side line, and does it in a scientific manner, is the one who gets the pull of the trade generally. Write for particulars of my correspondence course in Optics now, while your neighbour just thinks about it. Particulars from

G. E. Bamister

Practising
Optician,
BLOXWICH.

MCADAM & TUCKNISS, Sharedealers, 30 Tranquil Vale, Blackheath, London, S.E. Telephone 81 Lee Green.

SHARES FOR SALE (free of commission, subject):—260 Camwal Ordinary 6s. 1½d., 31 Preference 12s. 10½d.; 25 E. Cook & Co. £10 5 per cent. Preference, £8 8s. 9d.; 90 Idris "A" Ordinary 27s. 3d., 200 "A" 6 per cent. Preference, 21s. 4½d.; 170 G. B. Kent & Son Preference, 17s. 9d.; 20 Vinolia Preference, 91s. 3d.; 150 Ilford 6 per cent. Preference, 17s.; 100 A. J. White Preference, 10s. 10½d.; 100 H. Lamplough £5 fully paid, bid wanted.

WANTED (subject):—100 Baiss Bros. & Stephenson Preference, 20s.; 35 E. Cook & Co. Preference, £8 3s.

List of Shares for Sale and Wanted sent free on application. Bankers, London and County. Established 1898.

GREAT BARGAINS in Second-hand Shop-fittings.—The Fittings of a Shop, including range of drawers, with glass labels, £35; 1 10-ft. window enclosure, mirror centre, complete, £4; 12-ft. range of pine drawers, with gold labels and glass knobs, £6; 1 Canarywood wall-case, 5 ft. by 9 ft., £6; 144 stoppered bottles, gold labelled, sufficient for a shop, £5 15s.; 1 set of 3 3-ft. plate-glass shelves, standard bars and brackets, 35s.; 1 6-ft. mirror-centre dispensing-screen, £4 15s. **R. TOMLINSON & SONS**, Headquarters for Second-hand Fittings, BOND STREET, BIRMINGHAM.

"I HAVE FOUND

Your TOOTH BRUSH STAND and SHOW CARD combined very suitable for window show, and am very pleased and satisfied with results," writes a Wilts chemist. Quilliams Newberys, Sangers stock at 2s. net, or post free for 2s. 3d. from

Bernard Slack

319 High Street,
WEST BROMWICH.

CHEMIST'S second-hand Fittings, equal to new: counter-case, 6-ft., mahogany and bent plate-glass mirror back, £4 10s.; dispensing-screen, mirror back and counter fitted with sponge-case, £7 10s.; perfumery case, mirror back and mahogany desk, 53s. Cheapest house in the trade for alterations, window enclosures, wall cases, dispensing-screens, glass-fronted counters, glass facias, stall plates; estimates free. **H. Mills, Chemists' Complete Shop Fitter, Shop-front Builder, Steam Works, 163-5 Old Street, London, E.C.**

SHOP-FITTINGS, Showcases, etc.—Great sale previous to stock-taking; 12 ft. run of Mahogany Drawers, Lockers, Shelving, and Cornice, £11 10s.; Mahogany-top Serving-counter, 10 ft. long, 65s.; Wall-case, 5 ft. long, glass doors top and bottom, £6 10s.; 20 ranges of Drug-drawers, 50 Counters, 100 Showcases, various sizes; must be cleared. **Philip Josephs & Sons, Ltd., 93 Old Street, Goswell Road, London, E.C.**

SHOP-FITTINGS. SECOND-HAND FIXTURES.—Chemists requiring additional fittings or opening new premises would find it to their advantage to write us for particulars and photographs; we have a large assortment of second-hand fittings at rock-bottom prices. **WALTER KNOWLES & CO., 83 VICTORIA STREET, LIVERPOOL.**

IMPORTANT NOTICE TO CHEMISTS about opening new Premises.—We have positively the largest and finest Stock of Second-hand Fittings for sale at Unheard-of Prices; drawings and full particulars on application; inspection invited; shops fitted completely. **Ridduck & Co., Shop-fitters, 262 Old Street, London.**

CHEMISTS' SHOP-FITTINGS (SECOND-HAND).—Ranges mahogany drawers, with bevelled-edge glass labels and cut-glass knobs, shelving above, lockers below; mahogany dispensing-screens, counters with glass-case fronts, wall-cases, bent-front and flat-top counter-cases, counter-desks, tooth-brush cases, complete shop-rounds, etc.; every requisite for Chemists; extensive stock to select from at extremely low prices; practical men sent to all parts; illustrated catalogues and estimates free. **MATTHEWS, CHEMISTS' FITTER, 14 and 16 MANCHESTER STREET, LIVERPOOL.**

"PHOTOGRAPHY

and Hints on How to do it" is the name of a little booklet that I am turning out next week. Please ask for a free copy, as it is more suitable for you than those issued by firms having goods to sell, prices, &c., altered to suit you, and your own name on.

Bernard Slack

319 High Street,
WEST BROMWICH.

DRUG AND SPICE MILLS.—To Wholesale houses desirous of opening up Central Branch; good Offices and Extensive Warehouses, Drug, Spice, and Cattle Food Mills.—The Receiver for Debiture Holders is prepared to consider offers to purchase the Freehold Premises, Machinery, Stock, etc., of an old-established Midland business, or, in lieu of selling outright, to negotiate arrangements to enable the Debiture Holders to withdraw and join in reconstruction; good opportunity for getting control of a going concern with ample facilities and openings for extensive business. Apply, Messrs. Attlee, Edge & Co., Chartered Accountants, Edmund Street, Birmingham.

MCQUEEN'S System of Accounts for Chemists; fourth edition; everything is covered from wholesale invoice to trading account, balance-sheet, etc.; if you desire accounts on a footing equal to your professional skill, success is guaranteed, however elementary knowledge of bookkeeping may be. Particulars free, **McQueen & Sons, Moat Road, Leicester.**

HAVE YOU A LINE IN STOCK YOU WANT TO MOVE?—Send for "How to Make Advertising in a Small Way Pay." Penny stamp for postage to Publisher, 21 Paternoster Square, E.C.

YOU CAN

draw attention to your shop and money to your till with the aid of a few good handbills, and the cost is merely nominal.

5,000 4/6, 10,000 8/-, 20,000 15/-, carriage paid.

Remember.—Four kinds, in your own wording, may be had in a 20,000 parcel.

MARTIN NEWBY, 14 New St., Birmingham.

A NICE BIRTHDAY PRESENT for a Chemist and Druggist, or apprentice or assistant to one, is a copy of "The Art of Dispensing" or "Pharmaceutical Formulas," bound in half-morocco. The first named, thus bound, is 8s. 6d., and the second 12s. 6d. (with 6d. extra for postage), both being obtained from **THE PUBLISHER, 42 Cannon Street, London, E.C.**

"Dear Mr. Slack,—

"I enclose a cheque for whatever you have against me, and I should also like to pay you another year's fee on this cheque enclosed, as I am sure the methods adopted are on the right lines.

"The sale of our own specialities have considerably increased.

"Yours faithfully,

Chemists should note that above fee was not expected until April. Shall I earn a letter from you like this?

Bernard Slack

319 High Street,
WEST BROMWICH.

American Notes.

(From the "C. & D." Correspondent.)

GRAND LARCENY.—After a trial lasting more than a week Walter Freeman, a Rutherford, N.J., chemist, was found guilty of grand larceny in the first degree by a New York jury. Freeman had obtained \$2,250 from Messrs. Parke, Davis & Co. by falsely pretending that he had used the money to purchase platinum which, he said, was needed in experiments (see *C. & D.*, March 3, 1906, p. 329) he was making in which they were interested. Sentence was deferred.

AN ALCOHOL COMPANY.—The Standard Alcohol Co., of Minneapolis, has been incorporated with a capital of \$500,000. The company expects to have a plant erected and in operation at Le Sueur, Minn., by August 1, producing 10,000 gals. of alcohol a day. The product will be manufactured from wheat, oats, corn, and potatoes by a secret process purchased from the inventor in Germany. The manufacturers claim they can place a high-grade denatured alcohol on the market for general industrial purposes for 20c. a gallon, retail. As soon as the Minnesota plant is going the company intend to establish a plant in North Dakota.

DENATURED ALCOHOL.—Considerable interest is being manifested just now in the prospective sale of denatured alcohol in the drug-trade. The rules and regulations established by the Government, *à propos* of the new law, provide that denatured alcohol may not be kept or sold by any dealer in or rectifier of liquors. To this rule the retail druggist has been declared an exception, provided he sell liquors only for medicinal purposes. Druggists all over the country are now filing applications for Governmental permits to handle the substance; but, strangely enough, no denatured alcohol is yet purchasable in the market, although the law went into effect on January 1. Meanwhile the wood-alcohol manufacturers have reduced the price of their product to 45c. a gallon.

College Notes.

SOUTH OF ENGLAND COLLEGE OF PHARMACY.—The football team played a return match with Winterbrook F.C. at Herne Hill, on February 9, and won by a goal to *nil*. Kenny scored the goal.

GLASGOW SCHOOL OF PHARMACY.—The students of this school paid a visit to the Possilpark Pottery on Thursday, February 7. The party was conducted over the works by the manager, who gave a lucid explanation of the various processes involved in the making of porcelain, china, etc.

INTER-PHARMACY FOOTBALL LEAGUE.—On February 10 the "Square" team met "London College" at Shepherd's Bush. The weather was inclement, and the condition of the ground was not ideal; but the enthusiasm of the spectators was great. London scored first, but this was speedily equalised by the Square, and at the interval the score was: Square four, London one. In the second half both sides scored, and the result was a complete victory for the Square by eight goals to three. This result makes these two clubs equal again, and another match will probably be necessary to decide the ownership of the cup.

METROPOLITAN COLLEGE OF PHARMACY.—On Tuesday evening, February 26, a lecture, with practical demonstration and lantern-illustrations, will be delivered at the College by Mr. J. D. Kettle, B.Sc., etc., on "The Production of Toned Lantern-slides by Development." The College will be open at 7 P.M. to allow students to see the exhibits of photographic apparatus and work which have been promised by Messrs. Houghton's, Ltd., the Paget Prize Plate Co., and Messrs. Burroughs Wellcome & Co. The lecture commences at 8 P.M. Ladies are particularly invited.—On Monday last the students of the evening classes visited the South Kensington Museum, where the chemistry, botany, and physics sections provided the material for a long demonstration by the Principal, Mr. C. E. Sage.

WHERE TO STUDY.

The following educational institutions are advertising in this issue:

- South London School of Pharmacy, 325 Kennington Road, London, S.E.
- Westminster College of Chemistry and Pharmacy, Trinity Square, Borough, S.E.
- Metropolitan College of Pharmacy, 160 and 162 Kennington Park Road, London, S.E.
- London College of Chemistry, Pharmacy, and Botany, 323 Clapham Road, London, S.W.
- Birmingham and Midland College of Chemistry, Pharmacy, and Botany, 45 Newhall Street, Birmingham.
- Leeds College of Pharmacy, Clarendon Road, Leeds.
- Liverpool School of Pharmacy, 6 Sandon Terrace, Upper Duke Street, Liverpool.

Coming Events.

Notices for insertion under this heading should be received by the Editor on Wednesday of each week.

Saturday, February 16.

Inter-Pharmacy Football League. Matches: Westminster v. Muter's; London v. Metropolitan.

Tuesday, February 19.

Bradford Chemists' Association, Royal Hotel, Darley Street, at 9 P.M. Mr. Clement Fielding on "Katabolites."

Wednesday, February 20.

Society of Arts, John Street, Adelphi, London, W.C., at 8 P.M. Mr. Hal Williams on "Cold Storage and Food-supply."

Royal Microscopical Society, 20 Hanover Square, London, W., at 8 P.M. Mr. J. W. Gordon on "An Early Criticism of the Abbé Theory"; Mr. Jas. Murray on "Some Tardigrada of the Sikkim Himalaya"; and Dr. Eugène Penard on "Some Rhizopods from the Sikkim Himalaya."

Pharmacy Whist-drive, Palm Court, Royal Hotel, Plymouth. Tickets (3s. each) from Mr. F. Maitland (Hon. Secretary), 31 Chapel Street, Stoneyhouse.

Pharmaceutical Society of Great Britain, North British Branch, 36 York Place, Edinburgh, at 8.30 P.M. Messrs. W. B. Cowie and William Dickson on "The Assay of Pepsin by the Biuret Reaction."

Thames Valley Chemists' Association, Freemasons' Club, Richmond. Whist-drive. Tickets (2s. each) from Mr. Herbert S. Durbin (Hon. Secretary), 19 Victoria Road, Surbiton.

London Chemists' Association, South London Branch, The Horns, Kennington, S.E., at 3.30 P.M. Meeting to receive Secretary's report and consider local organisation.

North Kent Chemists' Association, Mr. A. A. Gillett's Medical-hall Rooms, 152 Milton Road, Gravesend, at 6.30 P.M. "Notes on Pharmaceutical Preparations," by Mr. A. Norman Hirst.

Western Chemists' Association, Norfolk Square Hotel, Paddington, W., at 8 P.M. Mr. J. Cofman on "Secret Remedies and Pharmaceutical Proprietaries in England and Abroad."

Cardiff Pharmaceutical Association, Art Gallery, Queen Street, at 7 P.M. Whist-drive. Tickets (2s. each) from Mr. J. D. Jenkins (Hon. Secretary), 112 Crwys Road.

Nottingham Pharmaceutical Association, Calvert's Café, Long Row, at 9 P.M. Mr. S. Royce, Ph.C., on "Pharmaceutical Testing."

Thursday, February 21.

Leeds Chemists' Association, Hôtel Métropole, at 8.30 P.M. Lantern-lecture by Mr. Peter MacEwan, F.C.S., on "The Art of Pharmacy," with modern illustrations by Mr. Fred Reynolds. Special tickets of admission (designed by Mr. Reynolds) can be obtained from any member of the Council, or from the Hon. Secretary, Mr. J. R. Bentley, 85 Kirkgate, Leeds.

Chemical Society, Burlington House, Piccadilly, London, W., at 8.30 P.M. The following papers will be communicated: "The Constitution of Oxyazo Compounds," by Mr. W. B. Tuck; "The Influence of Solvents on the Rotation of Optically Active Compounds"—Part IX: "A New General Method for Studying Intramolecular-change," by Dr. T. S. Patterson and Mr. A. McMillan; "The Reduction Products of Ortho- and Para-dimethoxybenzoins," by Messrs. J. C. Irvine and A. M. Moodie; "Replacement of Halogens by Hydroxyl—I: The Hydrolytic Decomposition of Hydrogen and Sodium Monochloroacetates by Water and by Alkali, and the Influence of Neutral Salts on the Reaction Velocities," by Dr. G. Senter; "The Reaction of Ammonium Salts with the Constituents of the Soil," by Messrs. A. D. Hall and C. T. Gillingham.

Peterborough Chemists' Association, Grand Hotel, at 6.30 P.M. Annual dinner. Among those who have promised to attend are Mr. R. Winfrey, M.P., Mr. Michael Carteighe, Dr. Symes, and Mr. W. S. Glyn-Jones. Tickets (4s. each) from the Hon. Secretaries, Mr. J. E. Saunders and Mr. John W. Hall, 6 Long Causeway.

Chemists' Assistants' Association, 73 Newman Street, London, W., at 9 P.M. Mr. R. R. Bennett on "The Protozoa."

Brighton Association of Pharmacy, 122 King's Road, at 9 P.M. Ordinary meeting.

Friday, February 22.

Royal Institution of Great Britain, Albemarle Street, Piccadilly, W., at 9 P.M. Mr. Dugald Clerk on "Flame in Gas and Petrol Motors," experimentally illustrated.

Saturday, February 23.

Inter-Pharmacy Football League. Matches: Metro's v. Westminster; Square v. Muter's.

THE annual dinner of the Teesside Chemists' Association will be held at the Royal Hotel, Stockton-on-Tees, on February 27. Mr. John Harrison (Sunderland) will represent the Pharmaceutical Society.

ASSOCIATION OF CERTIFICATED DISPENSERS, Apothecaries' Hall, London.—The annual general meeting will be held in the Apothecaries' Hall, Blackfriars, E.C., on February 28, at 7.30 P.M. Address by Mr. F. S. Toogood, M.D. (Lond.), barrister-at-law.

THE twenty-sixth annual junior pharmacy ball will be held at the Portman Rooms, Baker Street, London, W., on March 6. Dancing will begin at 9 P.M., and carriages may be ordered for 3.30 A.M. Tickets, including supper and light refreshments (7s. 6d. each) from the Stewards or Mr. J. E. Southon (Hon. Secretary), 8 Leadenhall Street, London, E.C.

THE annual dinner of the past and present students of the School of Pharmacy of the Pharmaceutical Society will be held at the Trocadero Restaurant, Piccadilly Circus, London, W., on February 27, at 7.30 P.M. Mr. J. R. Young (President of the Pharmaceutical Society) will be in the chair. Tickets (6s. each) from Messrs. Adams and Sanders, Hon Secretaries Dinner Committee, 17 Bloomsbury Square, W.C.

Exchange Column—Bargains.

TERMS.

One halfpenny per word with name and address. One penny per word if we register the address and attach a number.
No Advertisement inserted for less than 6d.

FOR DISPOSAL.

APPARATUS.

WHAT offers?—Specific-gravity bottle, complete; suppository mould, 12 by 15 gr.; suppository mould (glycerine), 12 by 60 gr. WHALEY, 155 High Street, Stoke Newington.

BOOKS AND PERIODICALS.

FIRST three vols. "Journal Photographic Society of London," March 1853 to March 1857; bound half calf; 10s. NORTH, Milton Road, Weymouth.

"NOSTRUMS," a pamphlet giving the composition of all prominently advertised patent medicines of every description; 7d. post free, P.O. preferred. H. MARX, Bain Square, Dundee.

WHAT offers? Green's, Oliver's "Botany," Muter's, Jago's "Practical Chemistry," Attfield's "Chemistry"; also B.P., 4s.; Southall's "Mat. Med.," 4s.; Newth's "Chemistry," 3s. 6d.; Edmund's "Botany," 1s. 6d.; "Pereira," 3s. GOOD, 51 Whitby Road, Fallowfield, Manchester.

QUAIN'S Dictionary, bound (2 vols.), as new; the "Modern Physician," illustrated (5 vols., bound), Sir Andrew Wilson, 1906; "Nervous Diseases," Ross (illustrated), 15s., take 4s.; Bentley's "Manual Botany," and other minor books. WAKEFIELD, 33 High Street, Stratford-on-Avon.

"BOTANY" (Vine's), "Botany" (Prant), "Botany" (Bower), "Inorganic Chemistry" (Thorpe), "Materia Medica" (Bentley), "Physics" (Stewart), "Flowers and Fruits" (Wills), "Pharmacy" (Wills), "Physics" (Wootton), "Volumetric Analysis" (Wills), "Medical Dictionary" (Hoblyn); 15s. the lot, or would divide. BOWEN, Belsize Road, Kilburn.

DRUGS AND CHEMICALS.

WHAT offers?—10 lb. ol. lavand. Mitcham 1901; must sell; going abroad. 153/82, Office of this Paper.

FORMULÆ.

NOTHING pays like your own specialities; Lee's 100 practical recipes contain all that the up-to-date chemist requires, 2s. 6d. post free. LEE, Chemist, Teddington.

THOROUGH specifo for "parasitic cholera" and all forms of "scour" in cattle, etc.; infallible "hoose" and "red-water" oures, etc.; essence of rennet, cod-liver emulsions, embrocations, cough remedies, etc.; full range of thoroughly scientific veterinary and pharmaceutical formulæ, preparations according to which are having enormous sales in various firms; original; unequalled. Particulars on application, Dodds, Medical Hall, Cramlin, Co. Antrim.

OPTICAL AND PHOTOGRAPHIC.

MICROSCOPE, by Crouch, as new; take £2 10s.; bargain. 150/8, Office of this Paper.

QUANTITY microscope-slides, cheap; botanical, entomological, etc. "CHEMIST," 14 Orchard Road, Kingston, Surrey.

PROPRIETARY ARTICLES.

CHEMIST wishes to exchange overstocked patents; list sent in return for yours. 150/26, Office of this Paper.

OVERSTOCKED.—1 doz. Othniel santal perles, 1 liq. euonym. et podoph. (Oppenheimer); what offers? WILSON, Chemist, Armley.

SHARES.

SHARES for sale. See p. 68.

EVANS SONS LESCHER & WEBB, LTD., six 5 per cent. £5 preference shares for sale, £5 9s. net. 125/27, Office of this Paper.

SHOP FITTINGS.

FOUR three-tier square plate-glass stands, good as new, size top shelf 17, bottom 20 in.; listed 70s.; offered 42s. each, £8 the four. DRAYTON, 12 The Mall, Ealing.

250 LABELLED shop-rounds, with or without stock, now being used in high-class Dispensing business; also fittings and utensils. "LONDON" (155/15), Office of this Paper.

MISCELLANEOUS.

2 15s. MARVEL sprays, quite new; what offers? 152/13, Office of this Paper.

2 VEEDEE vibrators, complete and practically new; offers. FARMER, Chemist, Longton, Staffs.

DENTAL lathes, surgery and laboratory; never used. H. GRANDISON, 14 Rona Road, London, N.W.

SODA fountain for sale; good upright counter case taken in part payment. Can be seen at SPINK'S AMERICAN PHARMACY, 27 Tottenham Court Road, W.

AVERY'S brass stand scales, No. 924, list price 43s., mahogany slab, splendid condition; one gross 1s. Daisies, unopened; 21 1s., 18 2s. 9d. Boyes' gout-mixture; 21 1s. embrocation; no reasonable offer refused for all or part. 149/36, Office of this Paper.

WOLFF'S students' ophthalmoscope: "Home Teacher" (5 vols., profusely illustrated), "Year-Book Pharmacy," 1895-1902, "Art Compounding" (Seoville), 1901, "Pharmacy and Poison Law," "Progress Pharmacy" (Bell and Redwood), "Squire," 1894, "Pharmacodynamics" (Hughes), 1870; cash offers. "VERAX," 36 Canterbury Road, Worthing.

OFFERS wanted.—Mahogany spectacle-case, ebonised, 3 plate-glass shelves, mirror door, trial case 24 pairs concave and convex lenses, case containing 100 pairs interchangeable lenses, quantity of steel, nickel, and gold filled spectacle and eyeglass frames, all Raphael's goods, perfect condition; Quain's "Dictionary of Medicine," 8 parts; case Fairbank's tar-soap, pill-machine, 24 5-gr. '98 B.P. pharmaceutical formulas. "CHEMIST," 410 Wandsworth Road, S.W.

WANTED.

CHECK-TILL, good condition. YOUNG, Chemist, Nantwich.

PLATINUM, disused, for cash. P. ROWSELL, 11 Crebor Street, Dulwich.

A CACHET-CLOSING machine. "LABORATORY," 11 Norfolk Street, Forest Gate, London.

CHEAP soda-fountain, without charging plant. GARRY, 9 Tulse Hill, Brixton, London.

CASH-TILL, cheap and in good condition, for 2½ rolls. "CYMBALIS" (150/4), Office of this Paper.

MINOR books, chemists' books, for cash or exchange. GOWER, Bookseller, Waterloo, Liverpool.

WALL-CASE, 9 ft. long, glass doors, top and bottom; cheap. JONES, 119 South Lambeth Road, London.

DENTIST'S chair; Branch Practice pattern; Lepper's or other. State condition, lowest price, "AJAX" (148/10), Office of this Paper.

ADDRESSES WANTED.

ADDRESS of The Toilet Requisites Co., late of Church Street, Birmingham. 20/15, Office of this Paper.

ADDRESS of Walsam, Davey & Co., late of Regent House, Regent Street, W. "T. A." (20/50), Office of this Paper.

